DICTIONARY OF COLOR

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A DICTIONARY
# of COLOR

BY

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First Edition

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PREFACE

This work is primarily intended as a reference for the individual who seeks to relate colors with the names by which they are commonly identified. The following pages contain the most extensive range of colors as yet published, together with a list of practically all recorded color names in use up to this time in the English language. Just as the English Dictionary records words and their meanings according to their accepted usage, in the same manner this Dictionary of Color is a record of color words and the particular color sensations they identify, as established by consensus of opinion of existing works.

From time to time, color samples have appeared in books, portfolios, and cards, each of these proposing various color names. These named samples, obtained from every available source, include, so far as the authors know, every work of any moment on this particular phase of the subject of color. The collecting of thousands of named color samples of practically every type of material has covered a period of several years, and the comparing and classifying of these color samples and color names have been very carefully and painstakingly carried out. In the case of a single color name appearing in numerous books and on hundreds of color cards, it was necessary to let the opinion of the majority establish the actual name for that color. This reflection of popular usage has been maintained throughout the preparation of the entire Dictionary, and the terminology proposed in the following pages represents an endeavor to crystallize the consensus of usage among individuals.

It is not the intention of this work to introduce any new type of color system nor to offer color names that have not already appeared in print. Language of color, as recorded in this work, is, generally speaking, the expression of matured and practised thought. In numerous instances the words are not new but the result of observation and selected interpretation that extends back through generations of common usage. It is true that our present language of color is, to a certain extent, composed of words that are somewhat meaningless in themselves as color terms. This refers to such words as "folly," "Westminster," and "elephant's breath"; they are lacking entirely in descriptive color value, yet their continued use earns them a place among the accepted color names that custom has decreed should compose our vocabulary. This has taken ages to produce and the words selected, whether or not appropriately descriptive, cannot undergo a radical alteration and still be understandably accepted by the majority for generations to come. With that fact in mind, this Dictionary has been assembled in the hope that it may serve as a common ground for the proper appreciation of all existing terms and the specific colors they represent. Vague as some of the present names are generally admitted to be, it is believed that if the colors they identify can be established with a fair degree of accuracy, and future reference to those color names be restricted to those individual colors, then much will have been accomplished toward clearing up the misuse of the present terminology.

Originators of color names are faced with an increasingly difficult task. The names of natural colored objects to which they could turn have been long since practically exhausted; that is, the names of: Flowers, Fruits, Vegetables, Trees, Nuts, Metals, Minerals, Gems, and aspects of nature, the sky, sea, atmosphere, etc., etc. Other fields of human interest have been invaded for color names, which in some instances have been quite unsuitable for this purpose, to a degree that even a recognition of the essential needs of Fashion in a strictly commercial world finds difficult to excuse. Many, on the other hand, have proven felicitous and appropriate.

It is therefore to be desired that when the time arrives for new names to be invented or adopted the individuals undertaking that particular task first study the miscellaneous assortment of unfortunate terms that comprise our present nomenclature and be properly guided in their new selection, in order that future terms reflect—at least, to some extent—the characteristics of the particular color the new name is to represent.

The tendency in the change of styles in clothing has from very early days been largely responsible for the introduction of definite styles in color for coming seasons, and with them always appeared new names. The names apparently need not necessarily describe the colors but must only possess sufficient oddness to impress themselves on the mind of the layman, for therein lies the sales value. Of the various names so conceived, few are remembered by the following season, but some unfortunately continue to persist. Careful study, however, by the writers has failed to reveal, save in a few instances, any indication of the common continuance of a name unless that name possesses some enlightening term that will be instrumental in conveying to the mind of another some suggestion of the color's identity.

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It would seem that, for our present nomenclature—as revealed in the following pages—we have drawn words indiscriminately from the various arts, sciences, and industries, as well as from nature itself. Practically every field of endeavor has contributed its share of terms to our present method of color expression. This is only natural, when the fact is considered that color and color terms, for both purposes of record and specification, are a distinct necessity in the continued activity of those very fields. It was, then, for no limited group that this Dictionary was formulated, but for the ever-increasing users of color terms who seek to gain a better knowledge and understanding of the proper use of those words which compose the language of color as we know it today.

In the preparation of this dictionary, we were concerned only with standardization as applied to color names and the color sensations on which the names are bestowed. We were not concerned with those systems that refer to colors by numerical terms either as regards the special forms of such numerical terminology or the methods by which the colors were arranged. Several tentative efforts were made in earlier days along these lines beginning with Chevreul's classic works. Today, we are fortunate in having the magnificent "Munsell Book of Color" (standard edition 1929), which in correctness of principle, completeness of treatment and artistic beauty of presentation provides a technical classification of high standing in the field of color.

It is with considerable pleasure that we recognize those firms and individuals in industry, art and science who, by their cooperation and valuable advice, have contributed so much toward the accuracy of this Dictionary. We particularly acknowledge the assistance of the Textile Color Card Association of the United States, Inc.; Robert H. Sterrett, one of the foremost silk colorists of pre-war days, formerly with the firm of Dexter, Lambert and Company, whose extensive knowledge of textile colors has been of great assistance; Dr. Frank H. Vizetelly, managing editor of the New Standard Dictionary; the National Silk Dyeing Company of Paterson, N. J.; the curators of several departments of the American Museum of Natural History, New York; S. S. Karpeles, chief chemist of the Sinclair and Valentine Company of New York, who made the colored inks used in this book; E. Johanneman, laboratory colorist of the Ault and Wiborg Company of New York, who made the gray inks; the late Arthur Seymour Jennings, of London; and the courtesy of National Lead Company, through its chief chemist, Dr. G. W. Thompson, in placing at the authors' disposal the color measuring facilities of its research laboratories.

Acknowledgment is also due the heads of many paint companies of both America and England, who have been most kind in searching through their old records for dates of earliest use of paint names, etc., a list of whom would represent practically all of the important paint manufacturers; and to all those whose previous work on the subject of color has been an invaluable reference in the preparation of the authors' material.

A. M.
M. R. P.

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A DICTIONARY OF COLOR

INTRODUCTION

It has frequently been observed that while standardization has been arrived at in practically all other fields, in the use of color names for identifying color sensations a condition prevails that is usually characterized as chaotic; a state of affairs conducive not only of misunderstanding and argumentation, but even, on occasion, of financial loss. Repeatedly the matter is given attention in press and technical journal, and a few attempts have been made to solve the problem, but while agreement is universal that a uniform nomenclature is desirable, no attempt has gained complete success, for several reasons. The principal one is, of course, impermanence of the colors used, which destroyed any value they may have had after short service. Others are: incompleteness of the range of colors shown and list of names given, arbitrary joining of names and colors with a lack of explanation of method or authority for so doing, and impracticability of system. Since the use of color in its brightest aspects has grown common in everyday life, in dress, printing, interior decoration, and the growing tendency to use color for exterior architectural embellishment, the need has become urgent for standardization and for a complete reference source of color names.

Out of that need has grown the present work, based upon an intensive study of all past authors, making free use of their best points and acknowledging the indebtedness due them with all praise for their labors, attempting to avoid those points that have been found to be impractical. The ideal has been to present, in an essentially usable form, a complete range of colors with small step differences, and referred thereto, a complete list of color names; a work that shall serve as a reference source for all the recorded color names that have come into use in the English language and exhibiting color samples thereof, acceptable as standard.

Examined closely, the confused ideas on color nomenclature are found due to two factors, one material, the other intellectual. The first has been the inability of color makers, in the past, to produce color substances that were both brilliant and permanent: brilliant colors have been fugitive to light while permanent colors have been more or less dull. The second is the difference of opinion as to the exact color indicated by any color name, and the lack of any authority by which an individual opinion can be upheld. These are the two difficulties to be met in producing any standard of color.

Permanence of Colors Used.—In all, only some half dozen books, of relatively comprehensive range, showing samples of colors with their names attached, have been published, here or abroad. In all or most of these, will be found, prominently noticed, a caution that the colors therein are fugitive and must not be unnecessarily exposed to the light. Thanks to recent advances in the science of color making, the contrary is found in the "Dictionary of Color." The inks used in this work, some of which were made especially for it, are reasonably permanent to light and the color plates may be freely exposed. They are, besides, very pure and brilliant, leaving in this respect little further to be desired. It must be remembered that a difference of texture affects the appearance of materials and that this outward appearance should not be allowed to influence the judgment of color qualities. The sheen of silk, the depth of velvet, and the gloss of enamel are each characteristic of the respective material, yet all may be of the same color. Again, outdoors the general color effect is subdued, especially in cities, where the streets contain much shadow and dark grey, so that by virtue of the unfatigued condition of the eye and of the contrast of the surrounding greyness, the small portions of bright color in hat, dress, window display, or otherwise, always appear of enhanced brilliancy.

The Standardization of Color Names.—On examining, back through the years, the subject of color names as identifying certain color sensations, it will be found that there exists no authority to which one may turn for an unqualified answer. A person may select one of the half dozen books mentioned or the color card of some organization, and accept it fully as his standard; but he will find that his neighbor has selected one of the others, and, as no two agree exactly, their users cannot agree. A third rejects both and sets up his own idea as standard. The cause of this disagreement is, primarily, the lack of anything in a color name, as such, that points unerringly to one single color sensation. The name Lemon Yellow would seem sufficiently accurate as a descriptive term, yet the color of lemons varies slightly and the memory for exact color sensations, when the original is not at hand, is often faulty. A further complication enters in the perfectly natural belief that one's own idea is the correct one, with the inclination to stick to one's opinion.

With those special, fancy, or seasonal names created for the needs of Fashion, the color as used by the creator, or recognized by some organization, would naturally be accepted as standard. But even in this case, such names, having an ephemeral existence only, soon tend to lose their accuracy because of the dulling of memory and the disappearance of samples. In regard to the old, traditional names that grew up from the earliest days with the language itself, in English as in other languages, countless references appear throughout the literature, along with occasional descriptions, mostly rather vague, sometimes with an attempt at precision; and side by side with these literary references, there came down to us the customary usage of the colors these names were supposed to designate. Apart from color terms of general application, such as Green, which was derived from an old Anglo-Saxon word, *Grene*, or varying forms of it referring to vegetal growth and which hence embraced a wide class of greens, from yellowish to bluish, from light to dark, and from bright to dull, all these names, however definitely they may have been applied to certain colors by their originators and early users, soon were given to slightly differing colors, for the reasons just mentioned. But research shows that they did not, in any case, change by general agreement in any one direction: all variations in each instance were grouped around the original color, which remained staple, and has remained staple down to the present day.

To arrive, therefore, at this original or central color, as it may be called here, for any color name, it is merely necessary to take the average from general practise. In other words, a consensus of opinion drawn from sufficiently wide sources is the only possible authority by which an acceptable standard can be established.

If some persons find that the standard reached by this method varies from their own ideas, the majority will find it in agreement. In no case can such variation be as great as exists between the wider extremes of variant usage; in most cases it will be quite small. Therefore, no business concern, finding a variation in its own practise from such a standard, need hesitate to change to the standard, since a purchaser would find a smaller difference of color between the old and the new, than between the color of the products of this concern and that of some other concern's product. As to matching the standard, any objection on the ground of difficulty in these days will not be offered. Some houses hold several grades of a product season after season strictly to the same color, without perceptible variation; others, as is well known, give the same name to three, four, and even more distinct variations of color, in different grades of material. This is a practise for which there can be no excuse. The purchaser is entitled to find all goods sold under a given name to be of the same color. It is true that under some conditions there occurs occasionally a slight change of color in stored goods but improved methods of manufacture and shelfing are rapidly eliminating this trouble.

Nor need any hesitancy to conform to this standard be caused by a feeling that it signifies any lack of originality, or a fear of showing the same colors as competitors are using. Such a feeling would signify rather an insecure business foundation or an erroneous business philosophy. Today service and honesty are recognized as the very essence of business success, and any policy that increases the confidence of the customer in the house advances not only the prosperity of the house, but that of business and of social life in general as well. Such a policy would be the maintenance by a concern of its colors, in whatever product or grade, strictly to standard, and the making of that practise known.

"A Dictionary of Color."—This is the method that has been followed in the present work. In no single case has an arbitrary association of name and color been made. The entire literature of the subject and thousands of samples of colored goods from Europe and America have formed the basis on which the average colors have been determined. Small squares of the samples were pasted on cards under each name and an elaborate index of various data compiled. Many of the references and books were obscure and difficult to obtain and the whole work has involved years of study. In matching the standards to the colors in this book, the entire edition has been printed first, under rigorous control of press work; the edition has been carefully examined for any possible variation of values on the different sheets, so that all sheets showing variation might be discarded. All matching and all technical measurements have been made on the printed color pages, and the color names, data, and index then printed. Only by such a method, though costly and laborious, could accuracy be assured.

PLAN OF THE WORK

Since any fairly complete method of presenting colors for recording or matching must necessarily contain a large number of color samples, their arrangement, to be practical and usable, becomes of major importance, so that any color may be rapidly and surely located. It is obviously impossible to show every variation of color with minute step differences; any such attempt would become unwieldy by virtue of the huge number required. The number herein shown was decided upon after practical tests as being the practical limit for useful work. Even so, a casual inspection of the plates may give the impression that any two adjacent color samples are alike. A trial at exact matching, however, will show that there is a distinct difference. Smaller steps, if such a thing be found necessary, may be indicated by interpolation.

The order of the colors follows the spectrum, which is here divided into seven main groups: Red to Orange; Orange to Yellow; Yellow to Green; Green to Blue-Green; Blue-Green to Blue; Blue to Red; and Purple to Red. In each of these groups, all the colors that intervene between the stated terminals are found on a single color plate, grading, by small degrees, from the full strength of the colors into white. Each group is given eight successive plates; the first plate in full purity; the seven following plates over increasing amounts of gray until the colors approach black.

Thus, as the main classification of a color is always known—that it is a Purple or a Yellow-Green, for instance—one can turn instantly to the proper main group and to the proper plate of the group, where critical match or determination is to be made.

A departure will be noted from the ordinary division of the spectrum into six chief colors, Red, Orange, Yellow, Green, Blue and Violet. Actual printing tests showed that these colors, as pigments, would not produce sufficient purity in the intervening mixtures; the first named set was the final result of many tests. It was further found necessary to use two Reds; in this case, owing to the nearness of the colors in hue, the two subdivisions appear in one group, called above, briefly, Red to Orange, but really a purplish Red to Red and Red to Orange.

The plates are divided into twelve rows and twelve columns, presenting the colors in twelve degrees, from full strength of hue at one end to no hue at the other. This would mean, that on the first plate of each group, the colors reduce to white; on the succeeding seven plates of each, they reduce to neutral grays.

The scale of the reduction was determined by calculation and experiment. The scale that would ordinarily suggest itself is that based on the Weber-Fechner law, the geometric series showing reflections of the following order in percentages: 0, 1^2, 2^2, 3^2, 4^2, 5^2, 6^2, 7^2, 8^2, 9^2, 10^2. Theoretically this would provide a very orderly scale, but practically, it is impossible to produce either 0 per cent or 100 per cent reflection, that is, either pure Black or pure White, on paper. The best black obtainable shows some reflection, the best white lacks total reflection. Therefore at least three of the steps of such a scale would be missing, leaving but seven. Again, for practical matching, smaller steps are needed than these. The most practical scale was found to be one of twelve steps, with relatively smaller intervals at the end which shows the lighter colors, in order that the lighter colors might be shown in sufficient number.

It was felt unwise to give the measurements of this scale, in gray steps, because of the possibility of these being attributed to the hue steps, the light reflections of which vary according to the hue used.

The reflection factors of the Gray inks as determined from the printed plates, are as follows:

	Percentage
Plate 2, A 1	73.5
Plate 3, A 1	66.7
Plate 4, A 1	47.6
Plate 5, A 1	38.2
Plate 6, A 1	28.0
Plate 7, A 1	20.4
Plate 8, A 1	10.0

The same set of seven Grays appears in each group, on corresponding plates.

The White, shown on the first plate of each group at A 1, the natural white of the paper, reflects 86.2 per cent of light. Its character, as shown by measurement on the Pfund Colorimeter, is as follows:

Dominant Wave-length of Transmitted Spectrum Area, $\mu\mu$		Reflection Factor, Percentage
Red	636	88
Yellow	586	86
Green	548	86
Blue-Green	493	85
Violet-Blue	456	84

Arrangement of Color Names.—The names are given on the left-hand pages, in spaces corresponding to the color samples. The names appearing here are of current usage, all obsolete names and infrequently used synonymous names being given in the index only. This provides in effect a graphic chart of current names, since it exhibits the relationship among the current named colors. This should be of especial value, as, owing to the large number of named colors so essential in the world of fashion, it has often been difficult in the past to determine a named color that differed in a required way from a given one.

Sources of Names Included.—No names for colors have been originated in this work. The sole purpose here is to present common usage, from the obsolete to the latest modish shades of fashion. The aim has been to provide an index of all color names that have attained record in the English language, including all foreign names that have gained currency in English: paint, textile, ceramic, scientific, technical, artistic, general. While many names, especially those used in the textile industry as fashionable colors, have had only a brief, seasonal life, they have been retained, for historical reasons, since they appear in technical and literary texts. These names have been gathered from the following sources:

The Textile Color Card Association of the United States, Inc.

The leading paint and varnish manufacturers of the United States.

The leading paint and varnish manufacturers of England.

French color names that have been used in English.

Artists' pigments.

Old vegetal, animal, and mineral dyes, because of their historical value; and those of a few of the modern coal-tar dyes, because they have come into popular use.

The literature of the subject, especially as listed in Appendix D.

Names Not Included.—The names of the majority of dyestuffs have not been included, as they are in general chemical terms, and are indicative of chemical substances rather than of color sensations. The names of the so-called coach colors, used in the painting of automobiles, carriages, and railroad cars, have not been included, because they are trade-names, current only in the business of the concern making them; they are mostly of the dark shades, are used in large numbers for a host of colors of minutely small differences, which are originated, changed, and dropped in the most capricious way, and never get into text matter, that is, never become colors of record. Many of the names used in the printing-ink and ceramic industries also have not been included, for the same reason. The names are terms for ordering the product according to a sample and description rather than real color names; a number would serve as well, and in fact, many of them have numbers attached. Some houses indeed sell their colors by numbers only, using no names.

Industries other than those mentioned, such as the paper, leather, feather, etc., are not, in the same sense, originators of color names, but are the users of a small number of names from the above sources.

There is another class of color names, of miscellaneous origin, which has been excluded from this work. Such names are those descriptive of particular uses rather than of colors, and have prefixed the names of parts of houses, ships, vehicles, implements, etc. A few examples are: Window-blind Green, Sash Green, Porch Drab, Piazza Blue, Ceiling Blue, Wall Green, Barn Red; Ship Green, Funnel Yellow, Hull Brown, Canoe Red; Auto Grey, Wagon Red, Chassis Red; Implement Blue, Agricultural Blue. Others are those adjectives describing qualities of the substance, as: Genuine, Fast, Perfect, Patent, Opaque, Transparent, etc., prefixed to color names. Again there have recently been a few cases of the application of old, thoroughly established names of artists' pigments or oil bases to mere varieties of mixed hues, different from the originals, such as: Chinese Blue, which is the term for one of the best grades of Prussian Blue; French Blue and New Blue, which are the terms applied to Artificial Ultramarine. These names are well known to all color makers and such careless duplication is very unfortunate, a deliberate creation of misunderstanding and confusion.

Another class of names not included is that which makes use of couplets, or combinations of two ordinary color names, such as Russet-Tan, Buff-Tan, Cream-Buff, etc. Such couplets are illogical in that the single terms are of specific character and contend in the mind for the controlling color sensation; moreover, as applied, they are found to exhibit no significance in the colors to which they were applied, the Russet-Tan being merely the Tan of ordinary use, the Buff-Tan merely the Buff; the result being only to weaken the meanings of the single terms. While only a few cases of the kind have occurred, it is a practise that should be immediately discouraged.

In English translation of foreign works on color, especially of books on the chemistry and manufacture of paints, there has been a tendency on the part of some translators to give English equivalents of foreign color names that referred to a chemical substance by a non-chemical name, such as that of a locality or a person, where a different name perhaps already existed in English. In some cases, of course, such names are in use in various languages, *e. g.*, Prussian Blue, Scheele's Green. In many cases, however, there exist names peculiar to a single language, which when translated directly into another, produce names not known in that language and appearing nowhere but in that translator's work. Where it has been possible to determine such cases, the names have been excluded.

Further, there appear in some of the older books (though they are still considered authorities), descriptions of coloring substances with names attached, mostly those of their makers, which never got beyond the laboratory stage, having been found perhaps too costly or too difficult in practise to manufacture, or poor in color quality, or for some other unknown reason. These have likewise been excluded.

Also there have been excluded color names of which adjectives indicating differences of value form part, since the terms *light*, *dark*, etc., are purely relative in meaning, and since there is no limit whatever to the number of names that might be made with such combinations.

An exception to the above class is made in a very few cases, which are included, where long and widespread use has made the adjective an integral part of the name and the name itself a standard in an industry; such as, for example: Light Red, a paint used by artists.

Textile Names.—This industry has in the past originated a myriad of names, some of which appear lacking in descriptive value. In addition, some confusion has resulted where more than one name has been applied to a single color, and where one color has been identified by different names.

This habit was inherited from the same promiscuous use of extravagant color names, in the European color cards, a practise which came down from very early days. Challamel's "History of Fashion in France," states that in the sixteenth century, for instance, "Frenchwomen wore colours, and great was their number—from *'Rat-colour'* to that called *'widow's joy,'* or *'envenomed monkey,'* or *'chimney-sweep'"!* Nor was this the only period when such names flourished; succeeding centuries kept pace with and even outdid the sixteenth in the invention of these extraordinary names for colors. The eighteenth produced in France: *Rash Tears, Paris Mud, Brand from the Opera, Burnt Opera House, Stifled Sigh,* and similar inspirations, according to Challamel; while in England the *European Magazine* for January, 1783, describes as fashionable: *Elliott's Red-Hot Bullets* and *The Smoke of the Camp of St. Roche.* It is manifestly impossible to identify exactly or to obtain authentic samples of such colors today, except in a few rare cases (Paris Mud, for one) where the colors remained for some reason in use for an extended period; nor would any useful purpose be served in so doing.

If one is inclined to smile at the whimsical names quoted above, as being in any sense an indication of the affected or effete mannerisms of an earlier and less civilized age, one should remember that today we match them with *Folly, Lucky Stone, Basketball, Elephant's Breath, Skating, Wireless, Water Sprite.* Perhaps there is some deep psychological reason for this poetic feeling towards the names for colors.

The Textile Color Card Association of the United States, Inc., composed of the leading manufacturers and dealers in the country, was organized for the purpose of obtaining a uniformity of practise by the widespread use of a selected list of color names and the standardization or fixation of these names to certain colors. In 1915 its first Standard and in 1916 its first Season Cards were issued, and two Season Cards have been issued each year since, spring and fall, forecasting the trend of style. Great benefit has followed in the textile and related industries.

Appreciating the value of the policy adopted by the Textile Color Card Association in its work, no textile names other than those recommended by it are included in this work, for the period 1916 to date. Prior to 1916, only those textile names that attained actual recorded life are admitted.

This Dictionary recognizes the authority of the Textile Color Card Association in its particular field, and accepts as standard the colors and names established in its cards, with the exception of certain of the traditional and common names, for the following reason:

Traditional and Common Names.—By traditional names are meant all those old names which came down from the Anglo-Saxon or entered the language during its early days; by common names, those which are less hoary, but which have been in common and widespread use for a century or more. A study of the history of such names, and of the colors associated with them over a long period by consensus of opinion, proves that in general the tendency has been to reproduce the color of the object whose name has been adopted as a color term; for ordinary color names, of course, have always been derived from material objects.

So natural would such a practice be, that it is with astonishment that we find departures from it; but we do, not only in the case of individuals and commercial concerns, but with authoritative standards for more general use. Any kind of object may show a variation in its color, surely, but, in many cases, that variation is quite small. We sometimes find, however, a color which differs widely from that permissible variation, or from a customary usage which is frequently very old. Sometimes one authority differs, sometimes another; sometimes all differ, but always in diverse and unaccountable directions. Common sense rebels against accepting such colors.

The matter is dealt with in detail in a later section on the History of Color Standardization; and individual colors are discussed, their differences recorded, and history given, in the Notes.

For colors other than those found in Ridgway or the Textile Color Cards, and which appear in the Funk & Wagnalls' New Standard Dictionary, the standards herein agree with those in that work, which gives a list of 388 names, including all the common names, many textile names, many paint names, and some miscellaneous. This list records the colors in terms of percentages of five fundamental colors on Maxwell disks. The colors and their dominant wave-lengths are given as follows: best English Vermilion 644; Mineral Orange 614; light Chrome Yellow 585; Emerald Green 521; Artificial Ultramarine Blue 452; also a black disk of Lamp Black, and a white disk of pure white cardboard. Since these are pigments that are easily obtainable, and since their exact hues are given so that any variation can be corrected, the colors in the list are reproducible at any time and in any place.

By the courtesy of Dr. Frank H. Vizetelly, managing editor of the New Standard Dictionary, the following data regarding that list is supplied: "Over 6,000 named samples of colors were obtained, comprising 3,500 textile; 1,300 printing-ink; 500 colored-paper;

300 woolen and cotton; and 400 paint and pigment specimens. Each sample of a given color name, from the various makers, was analyzed by the Maxwell disks, and the average taken, which, when placed upon the disks, may be considered to exhibit truthfully the general usage as to that color name." The work was done by the late Prof. William Hallock, of the Department of Physics, Columbia University, and through the kindness of Dr. Vizetelly, the original set of Maxwell color disks has been loaned to the authors of this book, in order to reproduce under identical conditions, the colors as listed. This collection of colors, containing so many textile names in use up to 1892, when the work was performed, is invaluable in thus preserving the fashionable colors prevailing during the Victorian era.

The Maxwell disk system is somewhat awkward to handle, which may account for the relative infrequency of its use in ordinary or commercial life. In "Color Nomenclature," Ridgway states that "For satisfactory color-wheel work it is necessary to discard practically all the so-called artists' colors, as being much too dull even to represent approximately the colors of the spectrum."

It should be remembered that what is being recorded and represented here are not the colors of the spectrum, but the colors of paints, textiles, and other materials, which are very much duller in themselves than the spectrum colors. The five pigments described above are accordingly quite capable of representing the colors listed, with the exception of thirteen, which are pointed out, and which are considered, for the analysis, as containing stated percentages of white or black. The inks used in the present work being of exceptional purity and brightness, these thirteen, as well as other highly brilliant colors, are presented direct.

All the colors in this list that are still in use, so that a representative collection of current samples could be obtained, have been checked against the list. It was found that the average color today, in most cases, is the same as that in use during the latter part of the nineteenth century, when the list was compiled.

Scientific Names.—There is considerable objection on the part of scientists to the use of color names derived from the names of flowers, on the ground that a plant of any given name may have flowers of many different hues, either on one plant or on the plants of various subspecies. The objection is valid but the habit is old and ineradicable, and in any inclusive dictionary the names must appear.

If a certain color sensation, which may be exactly specified by a statement of the measurements of its Hue, Value, and Purity, is otherwise universally known and referred to by a single name, which is used for that particular color sensation and no other, that name becomes as scientific a standard as any that can be devised.

The more names there are for different color sensations (from whatever source, if not of too extreme a nature like some of the textile names), the more accurately may such differences be indicated. It was lack of suitable names that perhaps necessitated the use in Ridgway's work of many couplets, like Buffy-Brown, Buff-Pink, Cream-Buff, etc., and the use of the adjectives of Value: Light, Pale, Pallid, Dark, Deep, Dusky and Clear. Such terms are purely relative, as is demonstrated by the fact that Ridgway used the same adjectives for different values with different colors, yet according to no system; the term *Light*, for instance, being used with a *shade* of Dull Green-Yellow in the form "Light Elm Green," as indicating a step next to a still darker shade called "Elm Green," as well as with a *tint* of the same hue in the form "Light Dull Green-Yellow." Considerable use is also made in that work of combinations of the above mentioned and other adjectives; such as: Pale Grayish Blue-Violet, Pale Grayish Violet-Blue, Pallid Grayish Violet-Blue, Pale Soft Blue-Violet. Further, these combinations have even had numbers attached, for other colors, as in: Dull Blue-Violet (1), Dull Blue-Violet (2), Dull Bluish Violet (1), Dull Bluish Violet (2), Dull Bluish Violet (3).

Such terms are unwieldy and susceptible to error in use. The words Light, Pale, Dark, Deep, etc., are essentially part of the most ordinary vocabulary of everyday life. They are absolutely necessary for the indication of more or less indefinite degrees of value, for which there are no other words to take their place. Beyond the impossibility of their restriction to certain values by any authority whatever, it would, therefore, be unwise that they should be so restricted. For these reasons all such terms have been excluded from this Dictionary.

A few colors appear in Ridgway's work, under names formed from those of the authors of prior books: Saccardo, Hay, Rood, Bradley (see Appendix D), such as: Saccardo's Olive, Hay's Maroon. These colors appeared in the originals simply as Olive, Maroon, etc., and represent, not special types of those colors, but merely the authors' idea of the colors. If a few colors have Saccardo's name attached, or Hay's, there is no reason why all should not; and no reason, further, why all other authors' names should not be used as well. Such color names are excluded from this Dictionary. These names form a class quite distinct from those that make use of personal names, such as Scheele's Green; where the name indicates a special chemical coloring matter, the manufacture of which was invented by the person named. Such names are in world-wide use and are definitely a part of color nomenclature. This latter class is included herein.

With the special exceptions noted, all the colors in Ridgway's work are maintained in this Dictionary.

Common Errors in Color Name Usage.—In considering color names, two distinct classes must be kept in mind. (1) Those applied to colors produced by single substances. This concerns practically only the pigments, in paint, ceramic, and other fields. Textile colors are produced with dyes, generally in mixtures of more than one, very few being used alone, the original names of which are chemical terms, with which the present work does not deal. With pigments, however, there exists in addition to a chemical term, a common name for each, generally quite old, which is used both as descriptive of the color sensation and as indicative of the substance itself. Such names are: Chrome Yellow, Raw Umber, Prussian Blue, Vermilion, etc., and various lakes. In making these colors, different batches of material, though passing through the same processes, appear often with slight variations. Though it would be possible, by the addition of other coloring matter, to hold these to a predetermined standard, it is doubtful if it would be necessary or commercially advisable. Their number, however, is quite small, and the slight differences of color that exist for the names in this class are unimportant. Further, the names refer specially to qualities of Hue and Purity, without regard to Value; that is, a Prussian Blue, whether full strength or light, is still a Prussian Blue. Many of these pigments, in full strength, are very dark and only show their true quality of color when reduced with white; and in addition, some of them show slight changes of hue, when they are lightened or darkened. While this Dictionary presents the names of these colors under single color samples, they should be understood as representative averages only.

(2) Names of colors produced with mixtures. These constitute by far the larger number, and since they necessitate the mixing of two or more substances, an exact match to standard should be obtained. It is in this class, moreover, that the greatest diversity of opinion prevails, as these are the colors most widely used. Examples are: Cream, Ivory, Buff, Maroon, Pearl Grey, Lead, Terra Cotta, Apple Green, Olive, etc.

There is no reason why a manufacturer should send out three or four different colors under the same name, a common practise, except that which admits the following of old-fashioned, rule-of-thumb methods and a lack of pride in his work. With up-to-date apparatus for control, the spectroscope, spectrophotometer, colorimeter, graphic charts of the mixing powers of various pigments, etc., mixing of colors to exact match becomes not only more accurate, but far easier, than with the unassisted eye.

The lack of agreement in regard to these names may again be subdivided into (*A*) that dealing with simple names; and (*B*) that dealing with names having the addition of qualifying adjectives, such as Light, Dark, Bright, etc. The first class is general and well known. The second is restricted practically to the paint industry. These adjectives are in general use, it is true, but mainly in an offhand way, whereas in the paint industry they are matters of record and affect the purchaser, as paints are placed on sale under these adjectival names. In textiles, qualifying adjectives are very little used, special names being given to all variations of color constants, as Fashion has found necessary.

Class A.—The primary and secondary colors, Red, Yellow, Blue, Orange, Green, and Violet, grade imperceptibly each into its neighbors. A Blue may be a Greenish-Blue or a Violet-Blue, and it may have varying degrees of Greenness or Violetness; the name Blue in fact is meaningless, except within wide limits, unless the influencing side-color is specified. Yet we find in practise the greatest confusion. For instance, colors are placed on the market ranging from a bluish Green to a Violet, from light to dark, and from pure to dull: and all called "Blue." "Blue-Greens," thus marked, are sold, which range from plain Green to plain Blue. The same practise is found with regard to the others in the class.

A special remark should be made with regard to Red. There is a very common practise of issuing paints specially for structural purposes, barns, floors, etc. called "Red," and some of them even "Bright Red" and "Rich Red," which are anything but Red. While a very few have some quality of redness, the majority are quite distinctly Browns. The best that can be said for them is that they may be Reddish Browns; they might just as well be called Green. Such paints are purchased mainly for their protecting power, and secondarily for their color; not, by any means, for their name. They are not, in most cases, Red, and they should not be called Red. They should be called what they are: Brown, or if desired, Reddish Brown.

With regard to the tertiary colors, the disagreement is not quite so marked. In some cases there is identity; in most, a slight variation; in others, a wide discrepancy.

Class B.—The qualifying adjectives are found to be those that indicate differences of value: Light, Medium, Dark, Pale, Deep, Tint, Shade; and those that indicate differences of hue or purity: Bright, Clear, Pure, Rich, Warm. A separate card index of this class was prepared, and examination of this proves that these adjectives, as generally used, have no meaning whatever.

In some cases, the "Dark" color, as named by certain makers is actually lighter than the "Light" color of the same hue as named by others. Nor is this due to the possibility that sets of colors of the same hue have been issued, named "Dark," "Medium" ("Middle" or name with no adjective), and "Light," by different makers, which in one instance may have had, as a group, a higher or lower value than in another. A study of the card index proves that in no case does such a condition exist. Moreover, it is frequently found that the list of colors issued by a single concern will contain the name of one of the set, but not those of the others; that is, certain houses have issued, for instance, a Light Blue, but not a Dark Blue or a plain Blue. Again the term "Light" is applied to the names of colors that are essentially Light in character; for instance, "Light Ivories" are found, but Ivory is already a "Light" color and, in practise, the "Light Ivories" as sold are no lighter than the plain Ivories by actual comparison. "Dark Apple Green" is another; but Apple Green is a color name to which, both by tradition and the most ordinary common sense, the adjective "Dark" cannot apply (what is a *dark* apple?); as a matter of fact, the "Dark Apple Green" referred to is no darker than the plain Apple Greens of other makers, and lighter than some. The Bright Greens, as named, have all been rather dark and not a single one has had anything in it that is ordinarily felt as implying a quality of brightness. The adjective "Brilliant" has been attached to "Medium Blue" when the color itself was so dark a blue as to be nearly a black.

It is unnecessary to multiply instances. The practise is general and affects the entire list of names and adjectives. Of course, not every manufacturer has committed all the errors possible or even most of them, but, on the other hand, hardly a manufacturer has escaped some. This may be due to the fact that no maker has issued more than a few such colors; if he listed many, a recognition of the existing condition must enforce the belief that the percentage of error would reach 100 in possible cases. Certainly there have been occurrences of so astonishing a departure from the plain meaning of these adjectives—themselves so common, so unambiguous, so lacking in any element of the abstruse, mysterious, or recondite—as to suggest the existence of such as thing as value blindness, as well as color blindness.

Another error in this class, but of hue, not of value, is a seeming ignorance of what colors become when they are darkened or a policy on the part of paint makers to implant or perpetuate erroneous ideas in the minds of the general public. This applies mainly to the Yellows. Everyone familiar with mixing colors knows that when Yellows are darkened they become greenish and are known as the Citrines, Olives, Bronzes, etc. The colors, however, which are sold under the name of Dark Yellow, are actually Dark Oranges, that is, Browns. There are even colors marked plainly "Yellow," especially in floor paints, cement paints, etc., which are truly Browns; this is a practise as unnecessary as it is unfortunate, the result of which can only be to increase further the confused and false terminology of the art of color.

Definitions.—In view of these confused practises, it would seem of benefit to all who make use of color terms to consider the plain definitions of these terms: as to whether they would not thus suggest recommendations that all might correctly follow to universal advantage; whether, that is, standardization is not also possible here.

Color.—In the Report referred to below, color is defined as the general name for all sensations arising from the activity of the retina of the eye and its attached nervous mechanisms, this activity being, in nearly every case in a normal individual, a specific response to certain wavelengths and intensities. In an endeavor to exemplify the above, characteristic instances have been given, such as Red, Yellow, Blue, White, Gray, Pink, etc.

The Three Attributes of Color.—It is commonly known that a color may change in three different ways only, which have become familiar as the three attributes of color. For instance a color may be (X) light or dark; (Y) pure or dull; and (Z) a Red, a Yellow, or a Blue, etc. When measurements of these three attributes have been accurately carried out and presented, the nature of the color has been specified; the recognition of it, however, depending upon the condition of the eye observing it. While very slight variations of response are common with different eyes and color blindness is by no means infrequent, it is necessary for purposes of discussion and the defining of terms to assume a constant or average response.

There have been perhaps as many definitions offered of these attributes as there have been writings upon the subject. None of them have been entirely satisfactory, while the three words used as terms have covered a very wide range of possible designations. There have been two statistical investigations of importance, one contained in the 1921 Report of the Colorimetry Committee of the Optical Society of America; the other in the July, 1926, number of the Journal of the Optical Society of America. The first covers the literature of the subject, incompletely but perhaps fairly representative. The list of books used, for purposes of interest, is given in Appendix A. The second covers current practise, as found by response to a questionnaire sent out to a considerable number of workers in color, in the fields of Art and Art Education (artists, teachers of art, and representatives of the general public); Industry (persons in executive or advisory positions in business); and Research (all members of scientific societies).

A summation of the tables given in the two reports, transformed here into percentages for better comparison, follows:

Attribute	Literature			Questionnaire		
	X	Y	Z	X	Y	Z
Hue	....	....	70.0	....	....	94.2
Other than hue	....	....	30.0			5.7
Value	32.9	....	....	34.9		
Brightness	27.8	1.1	....	32.0		
Intensity	7.5	23.2	....	17.2		
Luminosity	27.8	....	....	9.5		
Brilliance	3.7	3.4	....	6.2		
Saturation	....	31.3	....	....	30.2	
Color intensity	....	....	....	....	25.9	
Purity	....	19.7	....	....	19.7	
Chroma	....	20.9	....	....	14.6	
Strength	....	....	....	....	9.3	

Since, however, the totals given in this summation under the heading "Questionnaire" include three classes which show a marked preference for different terms, the complete tables are reprinted. (The replies to the questionnaire also brought many individual suggestions of odd terms, unnecessary to consider or present here.)

	Art and art education	Industry	Research	Total
Attribute X:				
Value	75.4	49.5	9.1	34.9
Brightness	5.9	12.8	52.0	32.0
Intensity	13.2	21.7	17.6	17.2
Luminosity	3.3	12.8	11.5	9.5
Brilliance	1.9	2.9	9.5	6.2
Attribute Y:				
Saturation	16.1	10.3	43.0	30.2
Color intensity	42.9	31.1	16.6	25.9
Purity	11.9	16.9	24.2	19.8
Chroma	20.4	21.6	9.7	14.6
Strength	8.4	19.8	6.2	9.3
Attribute Z:				
(Agreement on the use of this term)				
Yes	91.6	96.3	94.8	94.2
No	8.3	3.6	5.1	5.7

It will be noted that for Attribute *Z* the choice is almost unanimous for Hue, in all three classes. For Attribute *X*, Art and Industry show a marked preference for Value, Research for Brightness. For Attribute *Y*, Art and Industry prefer Color Intensity, while Research prefers Saturation, with Purity next. Thus, no great significance can apply to the grand totals. Where terms have become so well established as they are here, especially where one class thinks of color as pigment, the other generally as light; when the most authoritative literature of the subject, necessarily frequently referred to, provides so wide a diversity of usage, as is shown in the list appended; the difficulty of obtaining any universal agreement is apparent to all. Yet, for the advancement of the art, a consideration of any special fitness the various terms may have would seem of value.

If possible, the terms should refer only to properties of color as such, not, in addition, to other properties, as of its stimulus, etc. It should be stated also that the Report of the Colorimetry Committee mentioned above recommended the use of Hue, Saturation, and Brilliance.

Attribute X.—Luminosity and Intensity are immediately eliminated, as they are used in reference to other properties. Since Brilliance is found recommended by a body of importance, though in both tables it is shown to have received the smallest number of entries, its possible fitness should be examined. Brilliance is a word that has always had a highly specialized meaning. It was derived from the French word *briller*, which means, to sparkle or shine or blaze. *Briller* was itself taken in the fifteenth century into French from the Latin of the Middle Ages, from the word *beryllus*, which meant the beryl, or generally, a precious stone or crystal; the emerald and aquamarine are varieties of beryl. In the nice use of language, *brilliance* and *brightness* have always been discriminated: brightness referring merely to natural lights or to light alone in quantity; while brilliance implies something more than mere quantity, something that is unusual or artificial, which affects the emotions as well as the senses. A victory, a speech, a personality, a genius, a musical composition or performance, a scientific experiment or discovery, may all be *brilliant*. The word is in very widespread use, and is moreover constantly applied to colors in exactly this same sense.

The word Bright, also, is used so frequently as meaning the opposite of dull or grayed, that it too, in connection with colors, is far more often interpreted as meaning purity than as meaning quantity of reflective power. Since this ambiguity does exist, with both these words, it would seem better that the beautiful special significance of the one and the more general use of the other be left undisturbed.

The word Value on the other hand, already very widely used as describing this attribute, not describing any other, and not referring to any other properties, is one to which no objection can be offered, except that it is found in the nomenclature of other arts and sciences, in economics, music, finance, biology, mathematics. It would seem by that fact to have been found an excellent word for the purpose.

Attribute Y.—Intensity is eliminated, as having been used for another attribute, as well as for other properties. Strength is quite indeterminate. There are left Saturation, Chroma, and Purity. All three are widely used, with Saturation perhaps in the lead. It may be argued at once against Saturation that it is meaningless in itself and awkward; meaningless in that it cannot be understood without explanation, a fact which would militate against its acceptance as a universal standard term, certainly so in ordinary and commercial life, where standardization is much more urgently needed than among the few technical workers who already use it; awkward in that for low degrees of the attribute, in adjectival form, one must speak of an *unsaturated* color. Saturated is a past participle used here as an adjective and means that an action has been performed, which is not at all what is intended with regard to the attribute under discussion—the statement of a psychological quantity. "Unsaturated" means plainly that an action has been performed to totality and then undone to a certain degree. Saturation is a noun form derived from the verb and signifies the act of saturation or the condition resulting from the action. The term is, on occasion, distinctly awkward and is objected to by many scientists even though they sometimes use it from necessity.

Against the word Chroma is found the same objection that it likewise is meaningless without explanation. While it is true that every science is particularly concerned with the definitions of its terms and that no discussion can safely start without definitions of the terms to be used, it is also true that the terms applying to any subject so widely and frequently used as is color, so vitally of interest to everyone, and for which universal acceptance and use is desired, are essentially required to be, in at least some degree, self-explanatory.

Purity, the remaining word, is free from the objections stated. It is an old word, long used for the exact purpose of describing color as free from grayness, as well as generally in many other senses but always indicating a freedom from vitiating or extraneous qualities.

Attribute Z.—No discussion is necessary. The word Hue is already in such general use as to constitute a standard term.

The definitions below follow those found generally in English dictionaries and books on color. The attempt has been made to express them clearly, avoiding those labored phrases used in so many works on technical subjects, which strive so earnestly to be precise that they end in being abstruse.

Hue.—Hue is that attribute of a color by virtue of which the normal eye perceives it as differing from White, Black, and Neutral Grays.

Value.—Value is that attribute of a color by virtue of which the normal eye perceives it as holding a position in a light-to-dark scale.

Purity.—Purity is that attribute of a color by virtue of which the normal eye perceives, in addition to hue, the presence or absence of gray.

Light Colors.—A *light* color is one in which is clearly apparent an absence of color in considerable but not total degree, as produced in the case of a paint or dye by the addition of white paint, water, etc., or in the case of visible light by the addition of light of no dominant hue. (The desire to use simple words leads here to the necessary employment of one word, *light,* in two different ways; first as an adjective of relative quantity; second as a noun meaning visible radiant energy.)

Pale and Tint.—These terms are synonymous with the adjective *light* and are used interchangeably with it, except that *light* and *pale* are adjectives (or sometimes adverbs), while *tint* is a noun. The terms are merely relative and do not indicate any special degree of color-absence.

Dark.—A *dark* color is one in which is clearly apparent an absence of color in considerable but not total degree, as produced in the case of a paint or dye by the addition of black paint or a paint of complementary hue, or a stronger dye, or in the case of visible light by the diminishing of the amount of light.

Shade.—This term is synonymous with *dark,* except that *dark* is an adjective and *shade* a noun. Shade implies the absence of light; in general, by the interception of light-rays by some body; in paints, dyes, etc., by the additions described above under Dark. *Shade* and *tint* have become very generally used in philosophical discussions of color matters. *Shade* likewise has become very widely used as indicating simply a color, whether it is light or dark, pure or dull; to such an extent, in fact, that it would perhaps be hopeless to attempt to obtain a general change to another term not used as is Shade for the special purpose of indicating partial absence of light. It might as well be frankly recognized as possessing this secondary meaning, inasmuch as the subject under discussion generally prevents any misunderstanding of which of the two meanings is intended. It is true that very light colored materials, even White, may be "shaded" to any degree by a body interposed between them and the illuminating source. It is therefore true, by a sophisticated reasoning, that a pale, slightly grayed color might be held to be a "Shade" of the same pale color, less grayed. However, in ordinary language, by a shade is meant a distinctly dark color.

There are various methods of producing light and dark colors, extending to white and black, such as the placing of a transparent color over a surface of a different color, the juxtaposition of small dots of differing colors, as in the Impressionistic style of painting and in various methods of printing, the rapid alternation of different colors on one surface, as in the so-called natural-color motion picture, etc., all of which come under the second class of combinations of visible light. These methods are seemingly so different from each other and from the simple mixing of a black or white paint with a colored paint, that it has been thought necessary for the sake of completeness to allude to them briefly in passing.

Deep.—A *deep* color is one in which is clearly apparent no absence of color and no presence of black. The misuse of *deep* in place of *dark* is frequently made. This is unfortunate, as there is no other term that describes this particular quality of *full*, *strong* color. These two words are sometimes used, especially in the paint and printing-ink industries, but imply rather a greater coloring power in a substance. As *dark* fundamentally means an *absence of light*, artificially to be imitated in a color by the addition of black, for instance; so *deep* fundamentally means *extending downwards*, as in a body of liquid, where much internal absorption of all wave-lengths but one or a few of the entering light would produce a color in the emerging light approaching possible spectrum strength; that is, the liquid would seem to be of some *deep* color. (When, however, the depth of liquid became so great that a reduction of luminosity in the emerging light was apparent, the term *dark* would properly be used.)

There is especial need for the standardized use of the term *deep* in this sense, as there is much confusion in discussions on color, in describing, explaining or ordering colors of this kind.

Medium and Middle.—The term *medium* is used generally in America, *middle* in the British Isles. A *medium* color is one that is neither distinctly dark nor distinctly light.

Cool and Warm.—The term *cool* has been applied to those hues observed in natural objects with which a feeling of coolness has been associated, such as water, snow, ice, shade, shadows; they are: the Violets, Blues, Blue-Greens, and Greens. The term *warm* has been applied to those hues observed in natural objects with which a feeling of heat has been associated, such as fire, the sun, sunlight on objects, blood, etc.; they are: the Yellow-Greens, Yellows, Oranges, Reds, and Purples. The two terms are retained also for the duller colors and greys in each class.

Rich.—The dictionaries define the word *rich* by using the synonyms full, satisfying, luxuriant, abundant, etc. *Rich* colors are those that convey these impressions to the mind. The term seems most frequently applied to the darker colors. For instance, Maroon, Henna, or Cardinal might be called Rich, but not Cream, Pink, or Lavender.

Dull.—A *dull* color is one in which is noticeably present the quality of greyness.

Gray and Grey.—There has been an occasional description of these terms as indicating differences in the colors to which they are applied, one being held to mean a hueless mixture of White and Black, the other as possessing a cool hue. In point of fact, there is no difference. The two forms are simply two spellings of the same sound, which came down together from very early days in the language. The distinction was seemingly first made by George Field, whose books, especially the Chromatography, had a wide circulation during the nineteenth century; it formed part of an elaborate philosophy of color built upon individual ideas, certain of which would appear somewhat unfortunate. Such a distinction has never been made use of in the practical world. In America, the textile industry uses *Grey* for both classes (neutral and cool-colored Greys) quite uniformly; in the paint industry, while a few manufacturers use *Grey* for both classes, the majority use *Gray*. In England the use of *Grey* for both classes is very general. While drawing attention to the above facts, it may still be recognized that a distinction, if uniformly and widely used, might have some value for exact reference; not, as in Field's case, for separating a class of broken colors in which blue predominates (cool grays), but for indicating a neutral, hueless, gray, a color sensation into which only White and Black enter. Therefore this Dictionary uses the form *Grey* where the color has hue (whether cool or warm), following what seems in some degree a majority usage. It uses the form *Gray* where the color has no hue, but is a mixture of white and black only.

Tone.—The term *tone* is used to describe any slight modification in some recognized color, as a green of yellowish tone, a greenish tone of blue, a lighter or a duller tone of brown.

COLOR MATCHING

The color expert is thoroughly familiar with the tremendous influence exerted upon the appearance of any color when such factors are introduced as surrounding hues, fatigue of the retina, variance in sensibility of certain parts of the retina, after-images, different illuminants—their intensity and spectral character—

texture of surface of the sample, and the particular qualities possessed by certain coloring materials that alter their appearance under differing conditions, etc.

Doubtless everyone, at one time or another, has experienced difficulties in color matching. Perhaps the most difficult problem to contend with is in trying to match one type of colored surface against another of altogether different texture, such, for instance, as a gloss paint with a flat, or a flat paint with a colored fabric. In the majority of cases, however, where this Dictionary is to be employed for comparative purposes, a little care on the part of the observer will do much toward insuring a color match that can be readily checked whenever necessary.

The first step in matching an unknown sample with some color in this Dictionary is to place the two surfaces to be compared side by side on the same plane. Next, a piece of neutral gray paper, at least four inches square, should be obtained and an opening cut in the center that will measure 1⅛ by ¾ inches. Although white, black, light or dark gray paper might be employed, it is preferable, for purpose of general match work, to use a medium gray. The sample should be placed under the mask just described in such a manner as to occupy one-half of the opening. Through the remaining half should be observed the dictionary color, against which the comparison is to be made. It will be found that the mask is a useful innovation, since, first, it conceals surrounding colors, bringing into immediate focus the single color to be examined, and, second, it restricts the area of the sample to that of the hue against which it is being compared.

The next point of importance is the type of illumination under which the colors should be examined. Daylight has always been accepted as the standard from time immemorial. In addition, daylight, for general purposes of color matching, is customarily considered as white. In other words, it possesses no dominant hue. Such an illuminant is obviously a more logical standard than one which of itself will impart a different hue to the colored sample under examination. Colors that show a match in natural light often exhibit distinct differences when compared under artificial illuminants. Daylight is, of course, somewhat of a variable, its color changing throughout the day. The sunlight and skylight also differ. A color observed under sunlight will seem much "warmer" than when examined under normal skylight. Owing to these factors, it is always well, when matching a color, to note carefully and describe clearly the character of illumination under which it is observed if any record of the match is to be retained. Colorists have more or less universally adopted clear north skylight as standard for all matching work that requires a high degree of precision. This is a practise that should always be followed. If, however, circumstances render it impossible, then notation should be made of that fact. The important thing however is to provide conditions that can be readily duplicated when it becomes necessary at some future time to check the previous comparison. In transmitting the color notation, it is always well, therefore, to specify, the character of illumination or light conditions and angle of observation under which the reading was made. It is true, of course, that a color match can be obtained under all types of artificial illuminants, such as gas or electric light, and that the match can be readily repeated provided the light conditions under which the previous match was made are duplicated. It must be kept in mind, however, that two colors matched under artificial light cannot be expected to match exactly when compared under natural light. Since this is true, care should be taken to make all matches, whenever possible, under the clear light of a north sky; except in those infrequent cases where the colors will be observed only and always under artificial light, as in a theater, when matches should be made under similar artificial light.

The surroundings are also an important consideration. Care should be taken to see that the colors immediately surrounding the hue under observation be masked out from the field of vision, otherwise they will be liable to exert a marked brightness influence on the off edge of the sample that will make comparison difficult and impair the accuracy of the matching work.

Fatigue of the retina should also be guarded against. Matches in different colors should be spaced at short time intervals sufficient to enable the eye to recover from the natural fatigue occasioned by examination of the previous color. The eye is, however, a very adaptable organ, and recovery of the normal eye is distinctly rapid.

Needless to say, in color-matching work, peculiarities of vision are generally most pronounced. An individual, however, possessed of normal eyesight, should experience no difficulty in the use of this Dictionary. If given a satisfactory illuminant under which to examine and compare colors, the Dictionary should prove a very valuable reference.

Method by Which Color Samples Were Matched to the Plates in This Work.—In the matching of the colors of materials of several different types of surface, from complete matt or flat to high gloss, the method described below was used. It is first necessary to consider briefly what is meant by these terms.

It is frequently stated that it is impossible to match a gloss paint against a flat paint. A gloss paint and a flat paint can be matched, but under a special condition. This is, that the angles of observation and of incident light be kept constant. If after the match, the painted surfaces are observed from a different angle, or if the angle of incidence of light is changed, the colors are very likely to appear different, since the glossy surface will reflect directly perhaps more light or a different color from some nearby object, whereas the flat surface can do so in only very limited or no degree. A glossy surface of any color can, under special conditions, be completely altered in appearance by reflecting certain lights or colors in the immediate vicinity. One often observes high lights, or colored objects such as green grass, or colored yellow building brick clearly mirrored in the glossy finish of a red or black automobile. A flat surface cannot so reflect and hence retains its own color, little altered. A glossy surface obviously shows its true color only when conditions are such that no appreciable amount of white or of a different color from that of the surface observed is reflected to the eye.

Apart from the mere knowledge that an object possesses a glossy surface, it is apparent that the quality of glossiness or high polish is perceived *only* when there is contained within the outline of the object two or more different colors (including white, black, or grays), *in addition* to the possible but not necessary presence of shadow due to modeling. With perfectly flat paints, an artist can paint a perfect simulation of a highly polished object, such as a glass, china or metal dish, the surface of water, a bottle of oil, etc.

In pictures, however, the angle is fixed unalterably by the artist, according to the viewpoint he has chosen, while in life, angles of observations are in general constantly changing. When a match is spoken of in the industries using color, a match under all possible conditions is meant, and it is such a match that is, correctly, said to be impossible between gloss and flat paints. The same impossibility exists between the various degrees of gloss and flat surfaces of all kinds of materials, paints, textiles, ceramics, metals, etc.

Since certain colors and color names are used only with materials of a flat surface, and others only with materials of a glossy surface, while still others are used with all types of reflecting surfaces, it is necessary, in order to match all types to a single type, as of the plates of this book, that special care be taken to prevent the intrusion of any extraneous color or light, so that the samples might show their true colors.

In the Color Cards of the Textile Color Card Association, the samples are actual pieces of ribbon, skein dyed and specially woven so that half appears in satin and half in grosgrain finish, thus giving glossy and dull surfaces in each color. The angle here again affects the value of the colors, under certain conditions the satin appearing slightly darker than the grosgrain, under other, the grosgrain appearing darker. In matching these samples, the illuminating light, northern skylight, was at right angles to the line of observation (by which is meant the line from the eye to the sample), no bright light as from a window was permitted to reflect from the sample to the eye, and the fibres of the material were kept at right angles to the illumination; under these conditions, when the plane of the sample is perpendicular to the line of observation, both halves of the ribbon have practically the same value and very little adjustment is needed to make the color appear uniform throughout. Textile samples from other sources were placed in the same relative position. Such a method for observing color is easily duplicated and in fact is the ordinary practise.

In matching samples of a high reflective surface, such as gloss paints, enamels, and ceramics, cardboard shields were so disposed as to cut off any possible interfering light rays, especially of a different color from that of the sample. The use of the cardboard shields was more of a convenience in the handling of a large number of matches than an actual necessity, and is not required for duplication of the match. Since these samples have no texture or fibre, as is the case with textiles, it is sufficient to prevent disturbing reflections.

With samples of a flat surface, no special precaution is ordinarily necessary, but the position was kept the same as above.

Comparing Impressions.—It should be remembered that there are some color sensations evoked in the mind by media other than solid substances. In consequence, no actual match can be made with pigmentary surfaces. On the other hand, one observing, for example, the sky, receives an *impression* of a certain blue and it *is* possible to make a comparison of this specific mental impression with another, such as a pigmentary surface. From the Dictionary a color may be selected that seems most perfectly to represent in general character this impression. To say it exactly matched would be absurd since at no time could the value of the plate color approach the brightness of the blue sky. Color sensations, which appear similar, can however, be compared and recorded to such an extent as to be readily recognized. This is what has been attempted in this Dictionary in the case of such colors as sky blue, sky grey, horizon blue, sea green, fog, smoke and such of the other phenomena possessing of themselves no solid substance, but from which color sensations are received.

APPENDIX A

THE FOLLOWING IS A LIST OF TERMS FOUND IN THE LITERATURE ON COLOR, COVERING THE FIELDS OF ART, INDUSTRY, AND RESEARCH[1]

	Value	Purity	Hue
Art			
Brown (1)	value	chroma	hue
Boas (2)	value	intensity or saturation or brightness or brilliancy	hue
Butler (3)	value	chroma	hue
Cross (3a)	value or brightness or luminosity	intensity or saturation	hue
Cutler (4)	value	saturation	hue
Dow (5)	notan	intensity	hue
Field-Taylor (6)	tone	tint	hue
Hatt (6a)	(brilliance)	(saturated)	
Izor (6b)	value	intensity	hue
Jacobs (7)	....	brilliance	hue
Lemos (8)	value	intensity	hue
Parsons (9)	value	intensity	hue
Pope (9a)	value	intensity	color
Prang (9b)	tone	color intensity	hue
Ross (10)	value	color intensity	color
Vanderpool (11)	luminosity or value	intensity or purity or saturation	hue
Weinberg (12)	value	intensity	hue
Winslow (13)	value	chroma	hue
Industry			
Andrews (14)	value	chroma or intensity	color or hue
Cleland (14a)	value	chroma	hue
Dyer (15)	value	chroma or brilliancy or purity or intensity or saturation or strength	hue
Earhart (15a)	tone	chroma	hue
Hackleman (16)	value	chroma	hue
Parsons (17)	value	intensity	hue
Patterson (18)	brightness or clearness or luminosity	purity or saturation	hue
Starch (19)	brightness or value	chroma or saturation	hue
Taylor (20)	value	chroma	hue
Weber (21)	luminosity or value	chroma or intensity or purity	hue
Research			
Abney (22)	luminosity	purity	hue
Adams (22a)	....	....	hue
Allen (22b)	intensity	saturation	
Chevreul (23)	tones	intensity	hue
Church (24)	brightness or luminosity	purity	hue
Clifford (24a)	tone	saturation or intensity	hue
Dunlap (25)	intensity	saturation	colors
Green (25a)	luminosity	saturation	color
Hagen (26)	brightness	....	tone
Hamilton and Laurens (26a)	brightness	chroma	hue
Helmholtz (27)	helligkeit	....	farbton
Helmholtz (28)	brightness	fullness or saturation	hue or tone
Howell (29)	luminosity or brightness	saturation	color
Hurst (30)	brightness or luminosity	purity	hue
Luckiesh (31)	brightness	saturation	hue
Martin and Gamble (31a)	brightness value	saturation	hue
Maxwell (32)	intensity (or shade)	purity of a tint	hue
Meisling (33)	intensitat	farbennuance	farbenton
Merwin (33a)	brightness	purity	hue
Munsell (34)	value	chroma	hue
Nutting (35)	luminosity	tone of a hue	hue
Nutting (36)	luminosity	purity	quality or hue
Ostwald (37)	helligkeit	reinheit	farbton
Parsons (38)	luminosity	saturation	hue
Peddie (39)	brightness or luminosity	saturation	color or hue
Ridgway (40)	luminosity	chroma	hue
Rood* (41)	brightness or luminosity	purity	hue
Rosentiehl (42)	ton or luminosité	intensité or purité or teinte	couleur or espece or nuance
Starling (43)	luminosity	saturation	shade or colour
Thompson (43a)	brilliance or (optical) intensity	saturation	hue
Troland (44)	brilliance	saturation	hue
Tscherning (45)	intensity or brightness	purity or saturation or tint	hue or tone
Von Bezold (46)	brightness	purity	hue
Watson (47)	luminosity or brightness	purity	hue or color
Woodworth (48)	intensity	saturation	color tone
Young (48a)	....	chroma	
Dictionaries			
Century (49)	brightness or luminosity	chroma or saturation	color tone or hue
Century (50) & (51)	brightness or luminosity or tone or value	chroma or chromatic intensity or color intensity or saturation	hue
Standard (52)	brightness or luminosity or tone or value	purity or saturation	color tone or color quality
Webster's Int. (53)	luminosity or tone or value	chroma or intensity or purity or saturation	color tone or hue
Encl. Brit. (54)	shade	tint	hue

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[1] From *Jour. Optical Society of America*, July, 1926.

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[1] From *Jour. Optical Society of America*, July, 1926.

APPENDIX B

TABLE SHOWING FREQUENCY OF USE OF THE PRINCIPAL COLOR NAMES

The following table is based upon a count of a number of American and British paint manufacturers issuing colors under the names shown. The lists of manufacturers included the leading companies, that is, all those with national distribution and a few with lesser but important sectional distribution. Names with qualifying adjectives such as *light, medium, dark,* etc., were not included in the count. The numbers given represent percentages.

Most of the names appear in both lists. Of those that appear in one only, the majority would appear in the other but with a lower percentage than the last shown, or with qualifying adjectives, *light, dark,* etc. Only a very few have a restricted usage, such as: Colonial Yellow and Milwaukee Brick in America; Art Brown, Signal Red and Holly Green in the British Isles; and these are likely to cross the sea at any time.

In an examination of the literatures of Interior Decoration, Architectural Design, Costume Design, Color Harmony in Dress, and the history of costume, as well as of a few works on color generally, the same names seem to appear with approximately the same relative frequency, though no count was made from these sources. (Many such books were consulted, but they are among those mentioned as being excluded from the list given in Appendix D.) The only exceptions are Peach and Steel Grey, which are often used in the special fields noted but are hardly at all used as paint names. They are given in parentheses at the end of the list, as their percentages would fall below the limit used.

The table may therefore be considered as indicating the frequency of use of the principal color names.

American Makers		British Makers	
Ivory	100	Buff	100
French Grey	88	Cream	100
Cream	84	French Grey	100
Maroon	80	Stone	100
Red	76	Chocolate	83
Pearl Grey	72	Oak	83
Buff	68	Drab	75
Brown	68	Olive Green	75
Silver Grey	68	Pea Green	75
Colonial Yellow	64	Purple Brown	75
Orange	64	Salmon	75
Yellow	64	Primrose	67
Lead	60	Red	67
Sky Blue	60	Sage Green	67
Fawn	56	Sea Green	67
Delft Blue	52	Slate	67
Pea Green	52	Azure Blue	58
Pink	52	Chrome Yellow	58
Tan	52	Crimson	58
Apple Green	48	Emerald Green	58
Straw	48	Indian Red	58
Vermilion	48	Mast Brown	58
Dust	44	Old Gold	58
Gray	44	Pink	58
Slate	44	Signal Red	58
Blue	40	Sky Blue	58
Bronze Green	40	Terra Cotta	58
Drab	40	Turquoise Blue	58
Old Rose	40	Bronze Green	50
Sea Green	40	Eau-de-Nile	50
Seal Brown	40	Electric Blue	50
Bottle Green	36	Maroon	50
Moss Green	36	Moss Green	50
Turquoise Blue	36	Silver Grey	50
Canary	32	Apple Green	42
French Yellow	32	Electric Green	42
Golden Yellow	32	Flesh	42
Jade	32	Lavender	42
Leather Brown	32	Lead	42
Oak	32	Lilac	42
Stone	32	Orange	42
Terra Cotta	32	Oxide Red	42
Ecru	28	Pompeian Red	42
Golden Brown	28	Art Green	33
Grass Green	28	Brunswick Green	33
Olive	28	Canary	33
Olive Green	28	Carnation	33
Willow Green	28	Cement Grey	33
Azure Blue	24	Dove	33
Chinese Red	24	Grass Green	33
Chocolate	24	Gray	33
Flesh	24	Holly Green	33
Green	24	Ivory	33
Nile Green	24	Lemon	33
Sandstone	24	Myrtle Green	33
Shell Pink	24	Neutral Blue	33
Battleship Grey	20	Royal Blue	33
Brewster Green	20	Salmon Pink	33
Brownstone	20	Tuscan Red	33
Caen Stone	20	Vermilion	33
Cardinal	20	Wedgwood Blue	33
Crimson	20	Art Brown	25
Grey Stone	20	Bath Stone	25
Mahogany	20	Cinnamon	25
Mahogany Red	16	Fawn	25
Old Ivory	20	Golden Brown	25
Oxide Red	20	Hedge Sparrow Egg	25
Putty	20	Heliotrope	25
Tobacco	20	Mauve	25
Walnut	20	Nut Brown	25

American Makers		British Makers	
Wicker Brown	20	Old Rose	25
Blue Grey	16	Pearl	25
Carmine	16	Portland Stone	25
Cherry	16	Reseda	25
Gunmetal	16	Rose	25
Neutral Grey	16	Rose Pink	25
Pompeian Red	16	Saxon Blue	25
Powder Blue	16	Scarlet	25
Primrose Yellow	16	Spring Green	25
Quaker Grey	16	Tan	25
Russet	16	Teak	25
Sage Green	16	Ultramarine	25
Scotch Grey	16	Yellow	25
Spruce	16	Apricot	16
Big-4 Yellow	12	Biscuit	16
Beige	12	Brick Red	16
Blue Green	12	Cerise	16
Chestnut	12	Claret	16
Emerald Green	12	Coral	16
Green Stone	12	Daffodil Yellow	16
Lavender	12	Flamingo	16
Leaf Green	12	Geranium	16
Milwaukee Brick	12	Gobelin Blue	16
Quaker Drab	12	Granite	16
Robin's Egg Blue	12	Laurel Pink	16
Royal Blue	12	Lincoln Green	16
Salmon	12	Mole	16
Turkey Red	12	Peacock Blue	16
Yellow Stone	12	Plum	16
(Peach)		Privet	16
(Steel Grey)		Smoke Grey	16
		Tangerine	16
		Violet	16

TABLE OF STANDARD TEXTILE COLOR NAMES

The following color names were selected by the Textile Color Card Association of the United States, Inc., in its "Standard Color Card of America." Many of them are in use at present only in the textile and related industries. Those that are marked with an asterisk appear also in the lists of paint names above; some of those unmarked are also used for paint names, but in a smaller percentage than the limit used for closing the lists.

The names with 7th after them were in the seventh edition of the "Standard Color Card of America," but were dropped from the current eighth edition.

Almond Green
American Beauty
Amethyst
*Apricot
Aquagreen
Ashes of Roses, 7th
Autumn

Baby Pink
Beaver
*Beige
Bisque
Blossom
Light Blue 1, 7th
Light Blue 2
Light Blue 3
Light Blue 4
Light Blue 5, 7th
Light Blue 6
Bluebird
Blue Spruce
Blue Turquoise
Blush Rose, 7th
Bois de Rose
*Bottle Green
Brittany
*Bronze
*Brown
*Buff, 7th
Burgundy
Burnt Orange

*Cardinal
Dark Cardinal
*Carmine
Castilian Red
Castor
Chamois
Champagne
Chartreuse
*Cherry
*Chestnut, 7th
Ch'ing
*Claret
*Cleopatra
Copenhagen
*Coral
Coral Blush
Cork
Cornflower, 7th
Crabapple
Cracker
Crane
*Cream
Crocus
Deer
*Delft, 7th

*Ecru
Eggplant
*Electric [Blue]
*Emerald
Empire Blue, 7th
Ensign
Evergreen

Fallow
*Fawn, 7th
Fiesta
Flax
Flemish Blue
*Flesh
French Beige
*French Grey
Fuchsia

Garnet
*Geranium
*Gobelin
Gold
*Gold Brown
Golden Poppy
Golden Rod, 7th
Golf Green, 7th
Golf Red, 7th
Goya
Graphite, 7th
Grebe
Grecian Rose
Grotto Blue
Gull

Harvard Crimson
*Heliotrope
Henna
Hollyhock
Homage Blue
Honey, 7th
Honeydew
Horizon, 7th
Hunter

Imperial
Independence
Indian Orange
Indiana, 7th
Iris, 7th
*Ivory

Jadeite
Japan Blue, 7th
Jasmine
Jungle Green

Lacquer Red
*Laurel Pink, 7th
*Lavender
Leafmold
*Leather Brown, 7th
Leghorn
*Lemon, 7th
*Lilac
Lupine

Magenta
*Mahogany
Maise
Maple, 7th
Maple Sugar
Marine
*Maroon
Marron Glacé
Mermaid, 7th
Midnight
Mignon
Mignonette, 7th
Mist, 7th
Monkey Skin
Monsignor
*Moss, 7th
Mulberry Fruit
Mummy
*Myrtle

National
Navy 1
Navy 2
Navy 3
Negro
New Cocoa
Nickle
*Nile Green
Nude

Oakwood
Ocean Green, 7th
Old China, 7th
*Old Gold
*Old Rose
*Olive
Olive Brown, 7th
Olive Wood
*Orange
Orchid
Orchid Pink

Pablo
Palmetto
Pansy
Paprica
Patriarch
Peach
*Peacock
*Pearl Grey
Peasant Blue
Peking Blue
Pelican, 7th
Periwinkle
Pigeon
Pimento
Pale Pink
Pink 1
Pink 2
Pink 3, 7th
Pink 4
Pink 5
Pistache
*Plum
Polar Bear
Pompadour
Popcorn
*Primrose, 7th
Princeton Orange
Prune
Purple
Purple Navy
*Putty

Queen Blue
Quimper

Raspberry
Regimental, 7th
*Reseda
Rosebud, 7th
Rose Taupe
*Royal Blue
Rubellite
Ruby

*Sage, 7th
*Salmon Pink
Sand
Sandalwood
Sapphire
Saxe Blue
*Scarlet
*Seal
*Shell Pink
*Silver
Silverwing
Sistine
*Slate, 7th
*Smoke
Spanish Yellow
Spray, 7th
*Spring Green
Steel
Strawberry
Sunset

*Tan
*Tangerine
Tarragon
Taupe
Tea Rose
*Terra Cotta
Terrapin
*Tobacco
Topaz
*Turquoise
Turtledove

Vestal, 7th
*Violet

Weigelia
White
Wild Rose, 7th
Wistaria

Yale Blue

Zinc, 7th

APPENDIX C

POLYGLOT TABLE OF PRINCIPAL COLOR NAMES

The following table presents the principal color names in English, French, Italian, Spanish, German, and Latin. These names have been gathered from foreign color cards, dictionaries, and books on color. In some cases, different terms were found for the same English color name, all correctly used. For the sake of uniformity, wherever possible a cognate form was selected; where none existed, the most exact translation term. As in English, so in foreign languages, couplets are found, as: *Olive Green* or *Lemon Yellow;* and as in English, with the most commonly used terms, the generic word is often dropped. The ordinary usage is given herein. In French, Italian, and Spanish, the prepositions *de* or *di*, meaning *of*, are sometimes used, sometimes not, there seeming to be no rule on this point.

The foreign languages are inflected, whereas English is not; hence these words may be found with different terminations. For instance, *Cream*, as a Noun, in German is *Rahmfbare*, *a cream color;* but *Cream*, as an Adjective, is *Rahmfarben* or *Rahmfarbig, cream-colored.*

The following color names should be noted: *Buff*, *Drab*, *Citrine*, *Pink*, *Tan*. These names, while very old and common in English, have no corresponding terms in foreign languages, except *Tan* in French, where the words, *Tannée* or *Tan*, are used. In German, *Lederroth*, is sometimes used for *Tan*, and by analogy the Italian and Spanish forms, *Cuoio Rosso* and *Cuero Rojizo*, are here suggested. The English word *Pink* is frequently met with in most languages, especially in recent years, for a light red or pink color, and is therefore given in this table. The other four words noted are short and expressive and might likewise be adopted with advantage in foreign color terminologies.

The remaining names from the lists in Appendix B, not shown in the polyglot table, are not in common use in foreign languages.

English	*French*	*Italian*	*Spanish*	*German*	*Latin*
White	Blanc	Bianco	Blanco	Weiss	Albus (dull) Candidus (glossy)
Black	Noir	Nero	Negro	Schwarz	Ater (dull) Niger (glossy)
Gray	Gris	Grigio	Gris	Grau	Cinereus
Red	Rouge	Rosso	Rojo	Roth	Ruber
Orange	Orange	Arancio	Naranja	Orange	Aurantius
Yellow	Jaune	Giallo	Amarillo	Gelb	Flavus
Green	Vert	Verde	Verde	Grün	Viridis
Blue	Bleu	Azurro	Azul	Blau	Caeruleus
Violet	Violet	Violetto	Violeta	Violet	Violaceus
Amber	Jaune d'Ambre	Gi. d'Ambra	Am. de Ambar	Bernsteingelb	Succineus
Amethyst	Améthyste	Ametisto	Ametista	Amethyst	Amethysteus
Apple Green	Vert Pomme	Verde Pomo	Verde Poma	Apfelgrün	Pomaceus
Apricot	Abricot	Albicocca	Albaricoque	Aprikose	Armeniacus
Azure	Bleu d'Azur	Az. Celeste	Azul Celeste	Azurblau	Caeruleus
Blood Red	Rouge Sang	Rosso Sangue	Rojo Sangre	Blutroth	Sanguineus
Brick Red	Rouge Brique	R. Mattone	R. Ladrillo	Ziegelroth	Latericius
Bronze	Bronze	Bronzo	Bronce	Bronzeroth	Aeneus
Bronze Green	Vert Bronze	Verde Bronzo	Verde Bronce	Bronzegrün	Aeno-Viridis
Brown	Brun	Bruno	Pardo	Braun	Fuscus, bruneus
Canary Yellow	Jaune Serin	Gi. Canarino	Am. de Canario	Kanariengelb	Canarinus
Carmine	Carmin	Carminio	Carmin	Karmin	Kermesinus
Cherry	Cerise	Ciliegia	Cereza	Kirschroth	Ceraseus
Chestnut	Châtaigne	Castagno	Castaño	Kastanienbraun	Castaneus
Chocolate	Chocolat	Cioccolata	Chocolate	Chocoladesbraun	Cacainus
Cinnamon	Canelle	Cannella	Canela	Zimmtfarbe	Cinnamomeus
Clay	Argile	Argilla	Arcilla	Thonfarbe	Argillaceus
Copper Red	Rouge Cuivre	Rosso Rame	Rojo Cobre	Kupferroth	Cupreus
Coral	Corail	Corallo	Coral	Korallenfarbe	Corallinus
Cornflower Blue	B. Centaurée	Az. fiordaliso	Az. Centaurea	Kornblumenblau	Cyaneus

English	*French*	*Italian*	*Spanish*	*German*	*Latin*
Cream	Crême	Crema	Crem	Rahmfarbe	Cremeus
Crimson	Cramoisie	Cremisina	Carmesi	Carmesin, Karmoisin	Chermesinus
Emerald Green	V. Emeraude	V. Smeraldo	V. Esmeralda	Smaragdgrün	Smaragdinus
Fawn	Brun Faon	Br. Cerviatto	P. Cervatillo	Hirschkalbfarbe	Hinnuleus
Flesh	Rose Chair	Rosa Carne	Rosa Carne	Fleischrosa	Carneus
Gold	Or	Oro	Oro	Gold	Aurum
Golden Yellow	Jaune d'Or	Giallo d'Oro	Am. de Oro	Goldgelb	Aureus
Grass Green	Vert d'Herbe	Verde d'Erba	Verde Hierba	Grasgrün	Gramineus
Havana Brown	Brun Havane	Bruno Avana	Pardo Habana	Havanabraun	
Hazel	Br. Noisette	Br. Nocella	P. Avellana	Haselnussbraun	Avellaneus
Honey	Jaune Miel	Giallo Miele	Am. de Miel	Honiggelb	Meleus
Hyacinth	Hyacinthe	Giacinto	Jacinto	Hyazinthe	Hyacinthinus
Indigo	Indigo	Indaco	Indigo	Indigo	Indigoticus
Ivory	Ivoire	Avorio	Marfil	Elfenbeinfarbe	Eburneus
Lead	Gris Plomb	Grigio piombo	Gris Plomo	Bleigrau	Plumbeus
Lemon Yellow	Jaune Citron	Gi. di Limone	Am. de Limón	Citronengelb	Citrinus
Lilac	Lilas	Lilla	Lila	Lila	Lilacinus
Magenta	Magenta	Magenta	Magenta	Magenta	Magenteus
Moss Green	Vert Mousse	V. Muschio	Verde Musgo	Moosgrün	Musceus
Mouse Grey	Gris Souris	Grigio Topo	Gris de Raton	Mausfarbe	Murinus
Myrtle Green	Vert Myrte	Verde Mirto	Verde Mirto	Myrtengrün	Myrtillinus
Nut Brown	Brun de Noix	Bruno di Noce	Pardo de Nuez	Nussbraun	Nucatus
Ochre, Yellow	Ocre Jaune	Ocria Giallo	Ocre Amarillo	Lichter Ocker	Ochraceus
Olive Green	Vert d'Olive	Verde Oliva	Verde Aceituna	Olivengrün	Olivaceus
Pea Green	Vert Pois	Verde Pisello	Verde Guisante	Erbsengrün	Pisaceus
Peach	Pêche	Pesca	Melocoton	Pfirschfarbe	Persicinus
Peacock Blue	Bleu de Paon	Az. Pavone	Az. Pavo	Pfaublau	Pavoninus
Pearl Grey	Gris Perle	Grigio Perla	Gris Perla	Perlgrau	Margariteus
Pink	Pink	Pink	Pink	Pink	Subrutilus
Plum	Prune	Prugna	Ciruela	Pflaumenfarbe	Pruninus
Purple	Pourpre	Porpora	Púrpura	Purpur	Purpureus
Red Lead	Minium	Minio	Minio	Mennige	Miniatus
Rose	Rose	Rosa	Rosa	Rosa	Roseus
Russet	Roux	Rossiccio	Bermejo	Braunroth	Russus
Rust Red	Rouille	Ruggine	Herrumbre	Rostfarbe	Ferrugineus
Saffron Yellow	Jaune Safran	Gi. Zafferano	Am. Azafranado	Safrangelb	Croceus
Salmon	Saumon	Salmone	Salmon	Lachsfarbe	Salmoneus
Sandstone	Brun Grès	Br. d'Arenaria	P. de Asperón	Sandsteinfarbe	Arenaceus
Scarlet	Écarlate	Scarlatta	Escarlata	Scharlach	Coccineus
Sea Green	Vert de Mer	Verde di Mare	Verdemar	Seegrün	Mareus
Sea Green, bluish	Glauque	Glauco	Glauco	Glauch	Glaucus
Sepia	Sépia	Sépia	Sebia	Sepia	Sepiaceus
Silver	Argent	Argento	Plata	Silber	Argentum
Silver Grey	Gris Argent	Gr. Argento	Gris de Plata	Silbergrau	Argenteus
Sky Blue	Bleu de Ciel	Az. di Cielo	Az. de Cielo	Himmelblau	Caeruleus
Slate	Ardoise	Lavagna	Pizarra	Schiefergrau	Ardosiacus
Smoke Grey	Gris Fumée	Grigio Fumo	Gris Humo	Rauchfarbe	Fumeus
Steel Grey	Gris d'Acier	Gr. d'Acciaio	Gris de Acero	Stahlgrau	Chalybeus
Stone	Gris Pierre	Gr. Pietra	Gris Piedra	Steinfarbe	Petraceus
Straw	Jaune Paille	Gi. Paglio	Am. Paja	Strohgelb	Stramineus
Sulphur Yellow	Jaune Soufre	Gi. di Solfo	Am. de Azufre	Schwefelgelb	Sulphureus
Tan	Tannée	Cuoio Rosso	Cuero Rojizo	Lederroth	Adustus
Terra Cotta	Terre Cuite	Terra Cotta	Tierra Cotta	Terra Cotta	Testaceus
Turquoise Blue	Bleu Turquoise	Az. Turchina	Az. Turqueza	Türkisblau	
Umber	Ombre	Ombra	Sombra	Umbra	Umbrinus
Verdigris	Vert de Gris	Verderame	Verde Gris	Grünspan	Aerugineus
Vermilion	Vermillon	Vermiglione	Bermellón	Zinnober	Miniatus
Wine Red	Rouge Vin	Rosso Vino	Rojo Vino	Weinroth	Vinaceus

APPENDIX D

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The books in the following list were the main literary sources used in studying color names. Many of them contain color samples. Others were used in tracing the exact meanings of obscure names and in clearing up errors in regard to synonymous terms. Still others were used in determining the first literary appearance of color names. Many other books were also referred to, but as they were found merely to duplicate material already well authenticated, they were excluded as serving no purpose except to pad the list. Excluded also from this list are the names of those books on color that do not deal with color names, but because of their importance, the authors' names of a leading few are here given briefly. *Texts:* Chevreul, Munsell, Ostwald, Bezold, Rood, Luckeish. *Color Charts:* Chevreul, Prang, Radde, Klincksieck and Valette, Munsell, Ostwald. (These color charts refer to colors by variously devised number systems and contain no color names. The names of a few charts based upon a false analogy to the musical scale are omitted; such absurd systems have been periodically suggested for several centuries and are unworthy of being included in any list of scientific works.)

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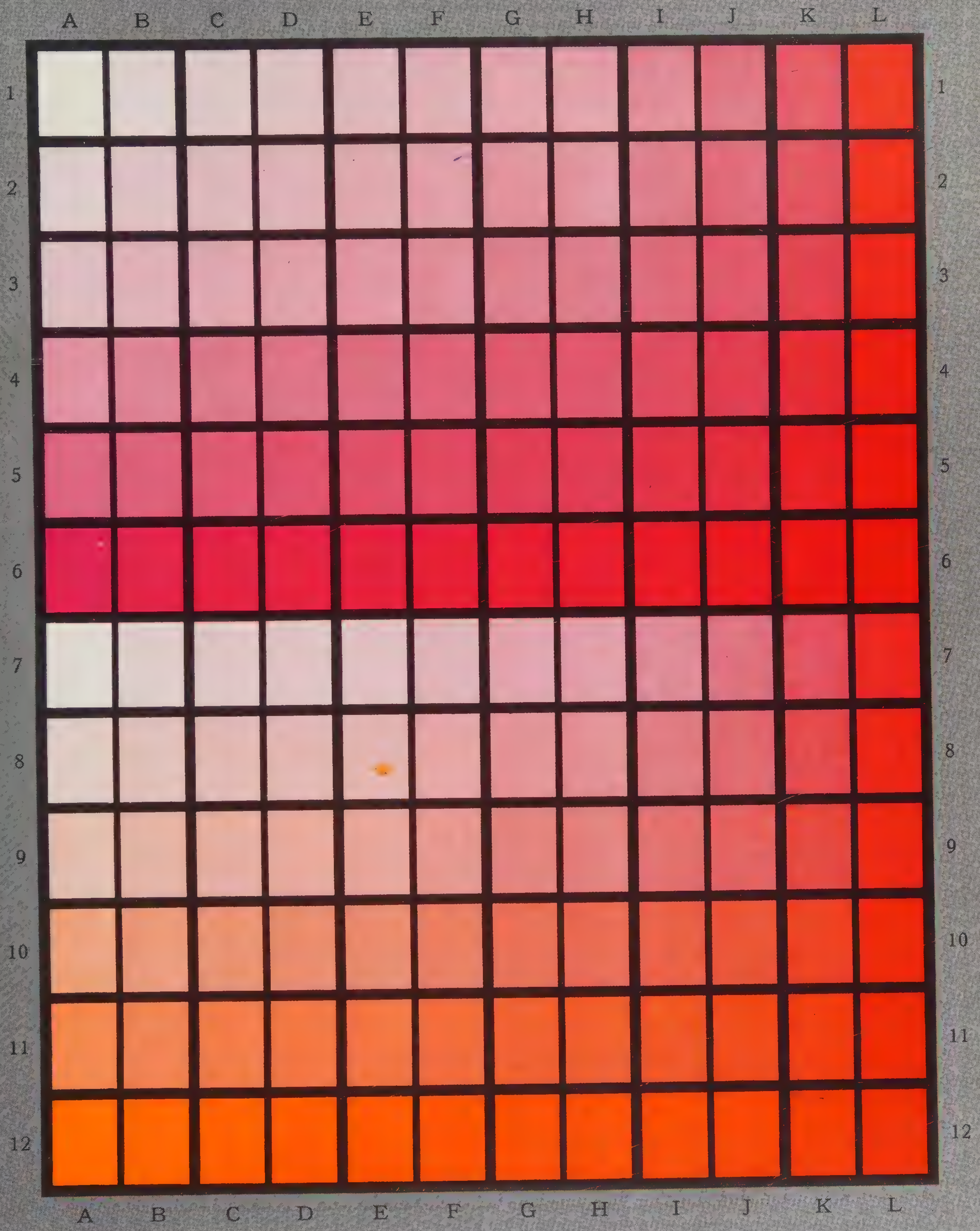
PLATES

	A	B	C	D	E	F	G	H	I	J	K	L	
1													1
2			Peach-blossom										2
3													3
4		Arbutus	Sweet Briar			France Rose			Casino Pk	Rose Neyron			4
5													5
6													6
7		**PINK 1^{T}**	**PINK 2^{T}**	Rose Breath	**PINK 4^{T}**	**PINK 5^{T}**	Débutante Pk LaFrance Pk		Rose d'Althœa				7
8		Opera Pk	**BABY PK**		Cupid Pk	Pink Pearl Rose Hermosa	Récamier		Cherry Bloom	Geranium Pk Bermuda			8
9		Safrano Pk						Pink Coral	Sweet William	Rose Soirée	Water-melon		9
10		Ibis Pk		Conch Shell	Shrimp Prawn Crevette	**CORAL BLUSH**	Aurora	Straw-berry Pk	**FIESTA** Crushed Straw-berry	Radiance	Firefly	**CASTILIAN R.**	10
11				Grenadine R		Tigerlily						Artillery	11
12		Toboggan	Flame Florentine	**INDIAN O**		Fire Red		Fire-cracker		**PONCEAU** Poppy Coquelicot		**SCARLET**	12
	A	B	C	D	E	F	G	H	I	J	K	L	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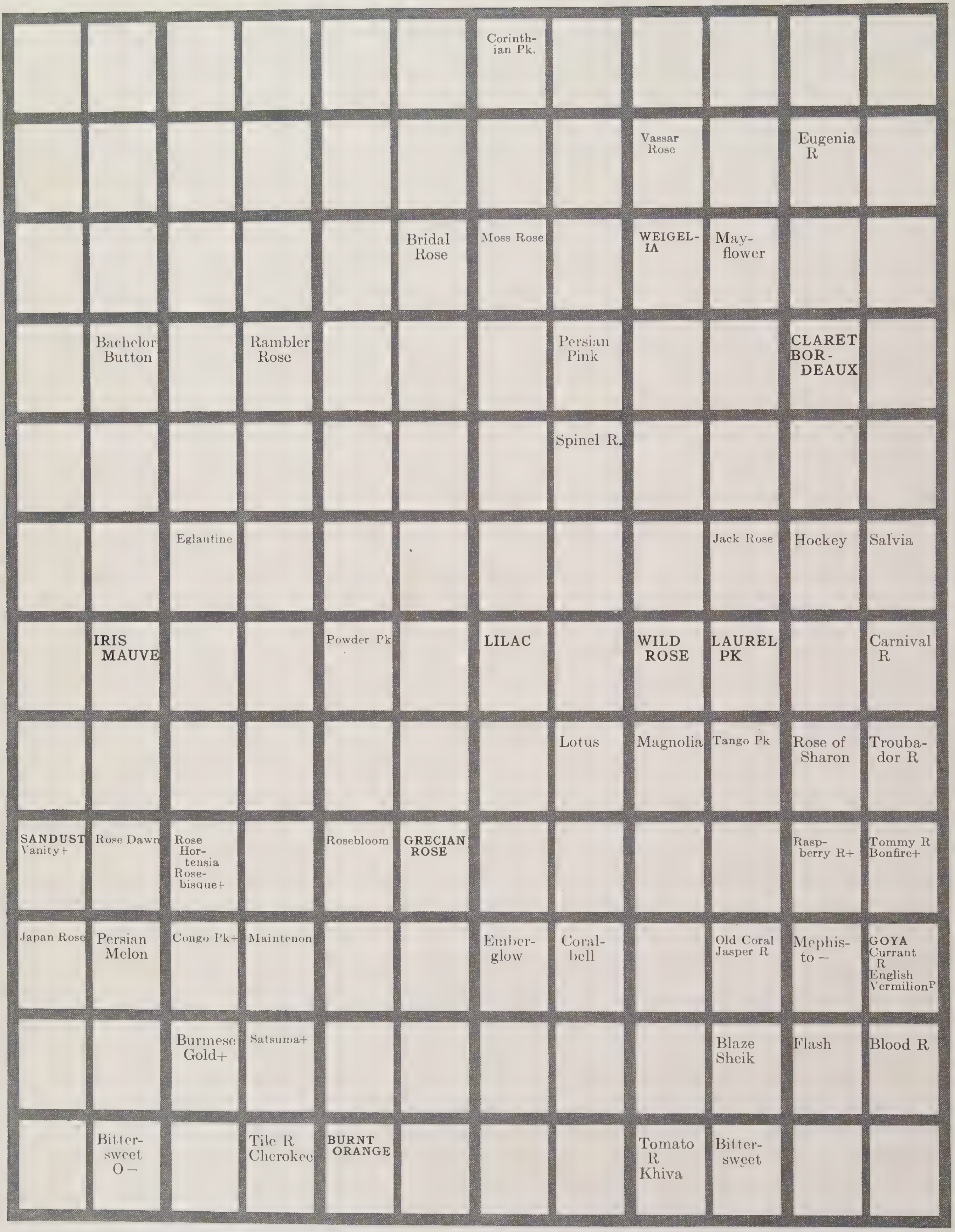

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1							Corinthian Pk.					
2									Vassar Rose		Eugenia R	
3						Bridal Rose	Moss Rose		**WEIGELIA**	Mayflower		
4		Bachelor Button		Rambler Rose				Persian Pink			**CLARET BORDEAUX**	
5								Spinel R.				
6			Eglantine							Jack Rose	Hockey	Salvia
7		**IRIS MAUVE**			Powder Pk		**LILAC**		**WILD ROSE**	**LAUREL PK**		Carnival R
8								Lotus	Magnolia	Tango Pk	Rose of Sharon	Troubador R
9	**SANDUST** Vanity+	Rose Dawn	Rose Hortensia Rosebisque+		Rosebloom	**GRECIAN ROSE**					Raspberry R+	Tommy R Bonfire+
10	Japan Rose	Persian Melon	Congo Pk+	Maintenon			Emberglow	Coralbell		Old Coral Jasper R	Mephisto –	**GOYA** Currant R English Vermilion^{P}
11			Burmese Gold+	Satsuma+						Blaze Sheik	Flash	Blood R
12		Bittersweet O –		Tile R Cherokee	**BURNT ORANGE**				Tomato R Khiva	Bittersweet		

PLATE 3

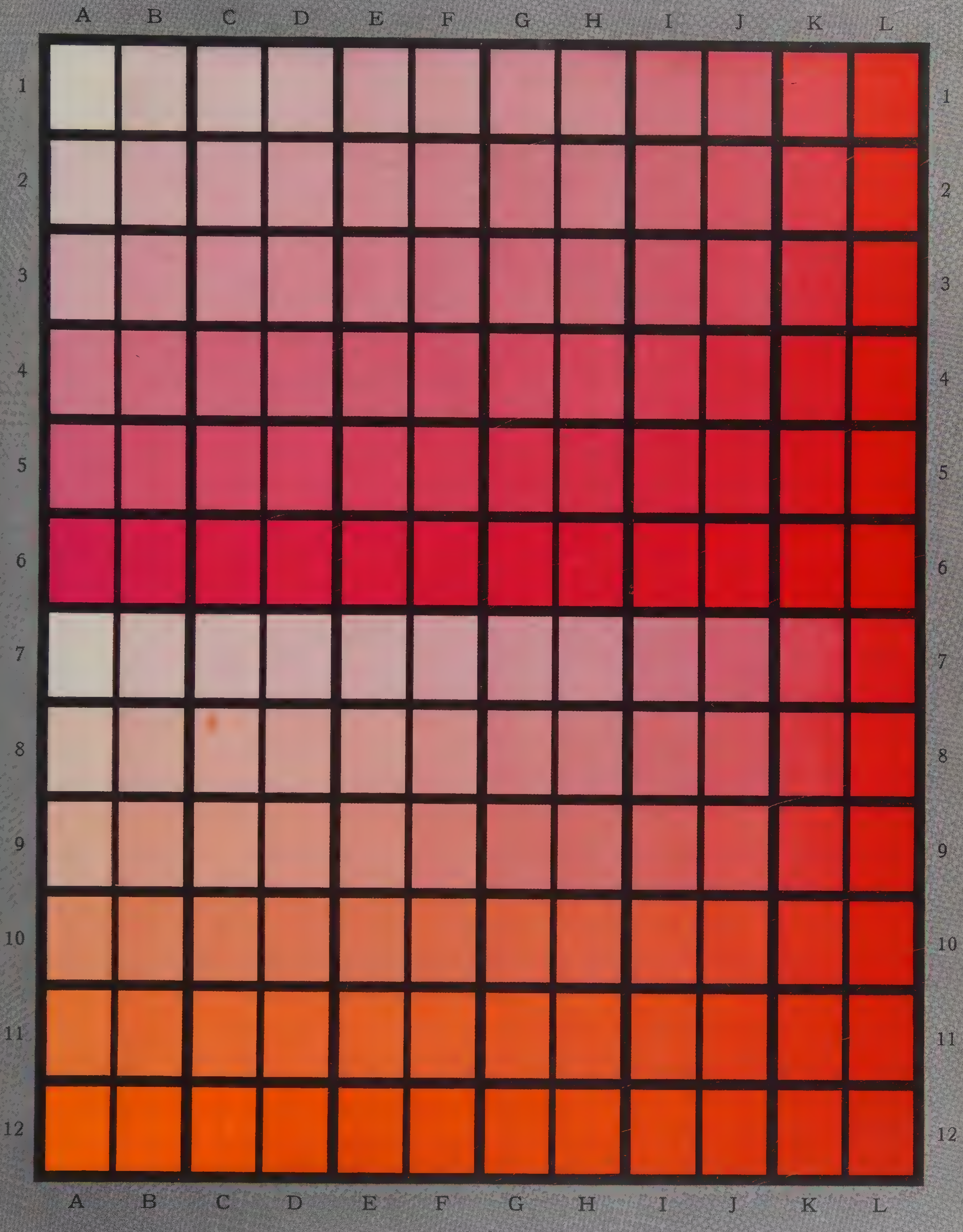
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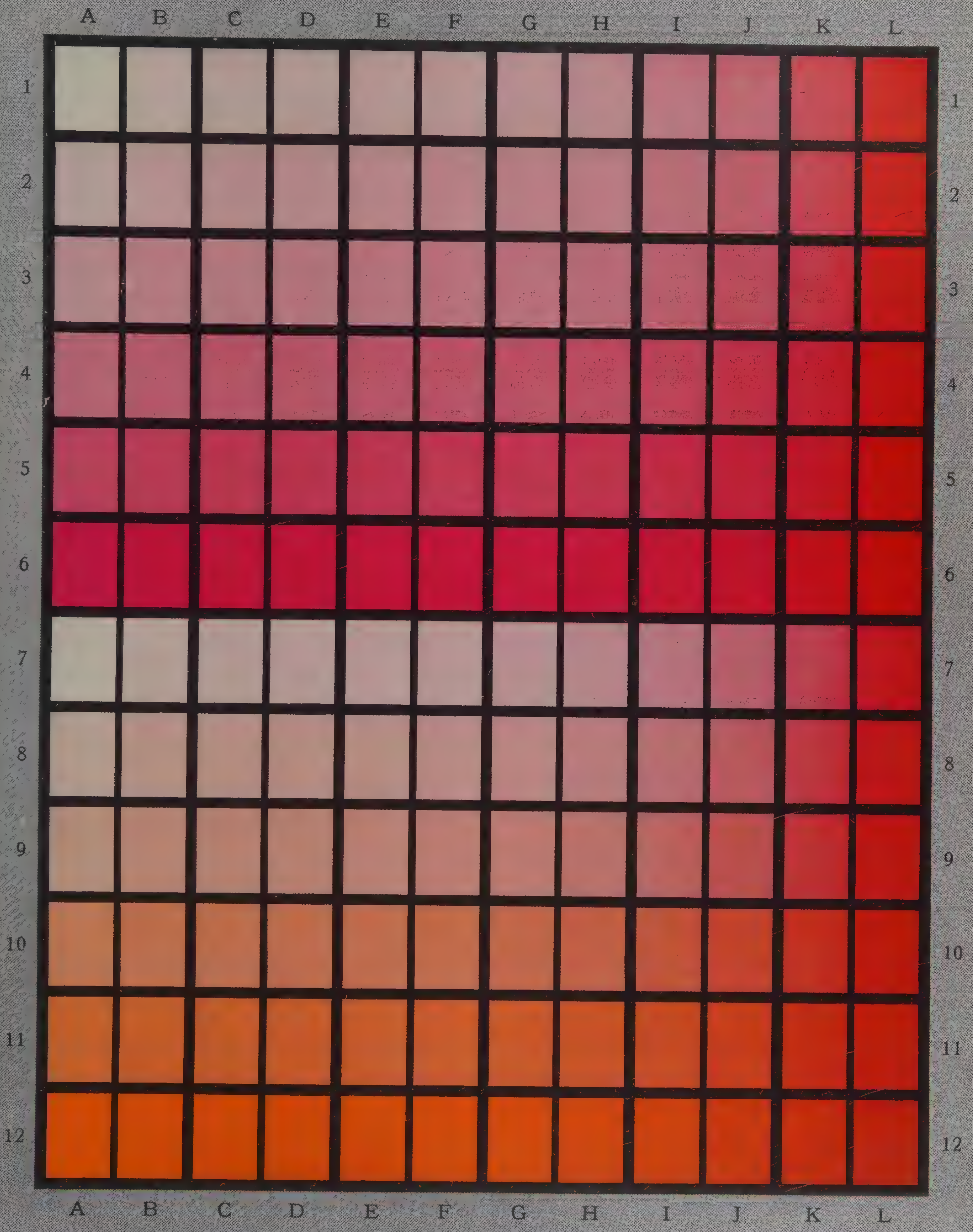
PLATE 4

	A	B	C	D	E	F	G	H	I	J	K	L	
1							Livid V				Damask		1
2								Gloaming	**OLD ROSE**	Japonica	Swiss Rose	Zinnia	2
3									Appleblossom	Azalea	Fragonard		3
4	**ASHES OF ROSE**	Moss Pk				Raspberry Glacé			Carnation	Cherry Blossom			4
5	Daphne R		Hellebore R		Solferino							Flaming Maple	5
6									Pomegranate Pr	**CERISE**	Sultan	Red Cross	6
7									Marie Antoinette				7
8		Touquet							Colonial Rose	Meadowsweet			8
9	Flesh Blond			Polignac					Marsh Rose		Doge		9
10	Woodland Rose **MUSCADE+**						Araby	Attar of Roses		Pompeian R	Pepper R –	Holly Berry	10
11		Pheasant Testaceous				Hyacinth R	Etruscan R	Samurai	Carnelian Copper	Canna Antique R	**LACQUER R**	Redfeather Buddha	11
12				**TERRA COTTA** Algonquin		Mosque			Nasturtium	Totem	Brazil R	Buccaneer	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 4



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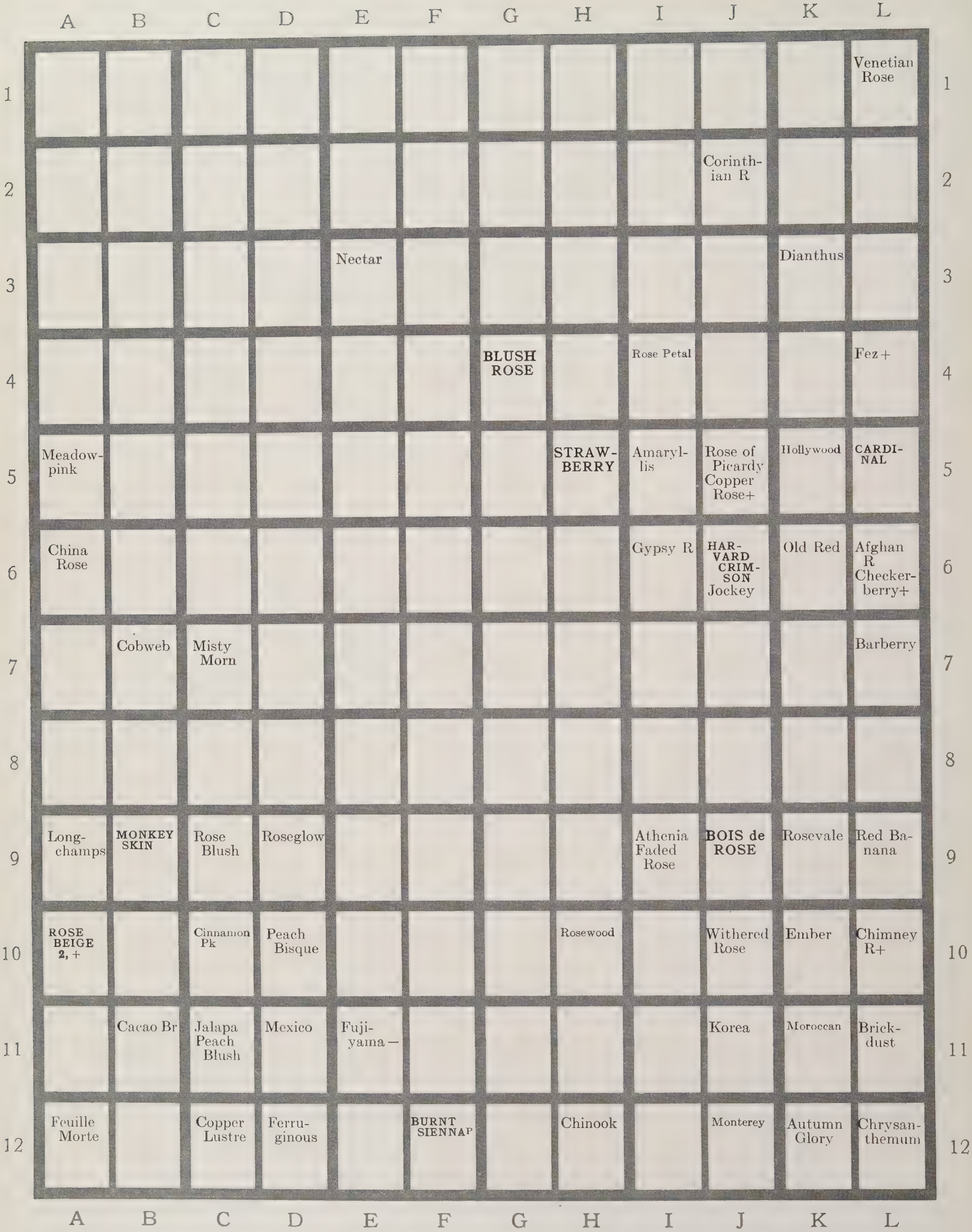
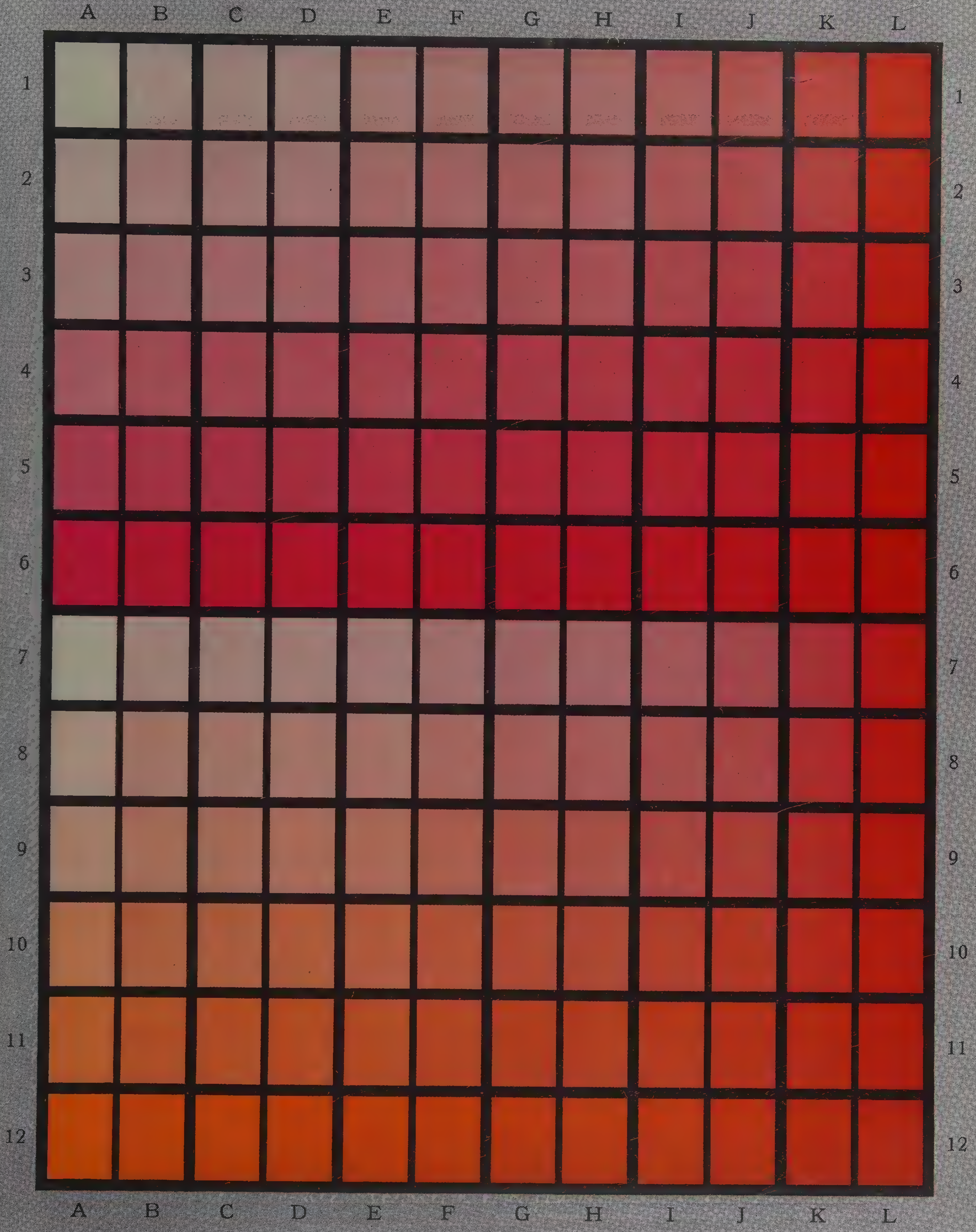


	A	B	C	D	E	F	G	H	I	J	K	L
1												Venetian Rose
2										Corinthian R		
3					Nectar						Dianthus	
4							**BLUSH ROSE**		Rose Petal			Fez +
5	Meadowpink							**STRAWBERRY**	Amaryllis	Rose of Picardy Copper Rose+	Hollywood	**CARDINAL**
6	China Rose								Gypsy R	**HARVARD CRIMSON** Jockey	Old Red	Afghan R Checkerberry+
7		Cobweb	Misty Morn									Barberry
8												
9	Longchamps	**MONKEY SKIN**	Rose Blush	Roseglow					Athenia Faded Rose	**BOIS de ROSE**	Rosevale	Red Banana
10	**ROSE BEIGE 2, +**		Cinnamon Pk	Peach Bisque				Rosewood		Withered Rose	Ember	Chimney R+
11		Cacao Br	Jalapa Peach Blush	Mexico	Fujiyama —					Korea	Moroccan	Brickdust
12	Feuille Morte		Copper Lustre	Ferruginous		**BURNT SIENNA** P		Chinook		Monterey	Autumn Glory	Chrysanthemum

PLATE 5



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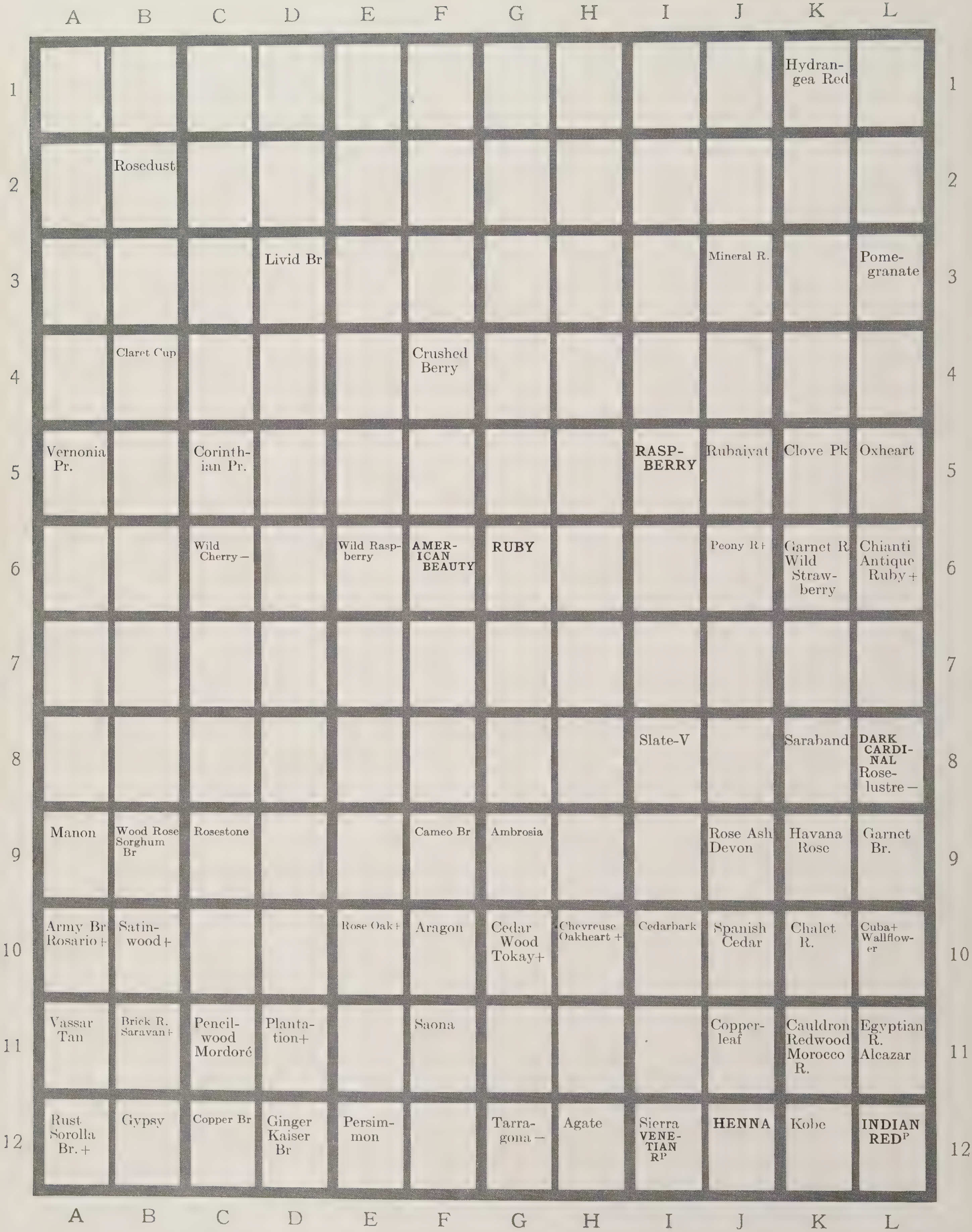

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1											Hydrangea Red	
2		Rosedust										
3				Livid Br						Mineral R.		Pomegranate
4		Claret Cup				Crushed Berry						
5	Vernonia Pr.		Corinthian Pr.						**RASPBERRY**	Rubaiyat	Clove Pk	Oxheart
6			Wild Cherry —		Wild Raspberry	**AMERICAN BEAUTY**	**RUBY**			Peony R+	Garnet R Wild Strawberry	Chianti Antique Ruby +
7												
8									Slate-V		Saraband	**DARK CARDINAL** Roselustre —
9	Manon	Wood Rose Sorghum Br	Rosestone			Cameo Br	Ambrosia			Rose Ash Devon	Havana Rose	Garnet Br.
10	Army Br Rosario +	Satinwood +			Rose Oak +	Aragon	Cedar Wood Tokay+	Chevreuse Oakheart +	Cedarbark	Spanish Cedar	Chalet R.	Cuba+ Wallflower
11	Vassar Tan	Brick R. Saravan +	Pencilwood Mordoré	Plantation+		Saona				Copperleaf	Cauldron Redwood Morocco R.	Egyptian R. Alcazar
12	Rust Sorolla Br. +	Gypsy	Copper Br	Ginger Kaiser Br	Persimmon		Tarragona —	Agate	Sierra **VENETIAN R**^{P}	**HENNA**	Kobe	**INDIAN RED**^{P}

PLATE 6

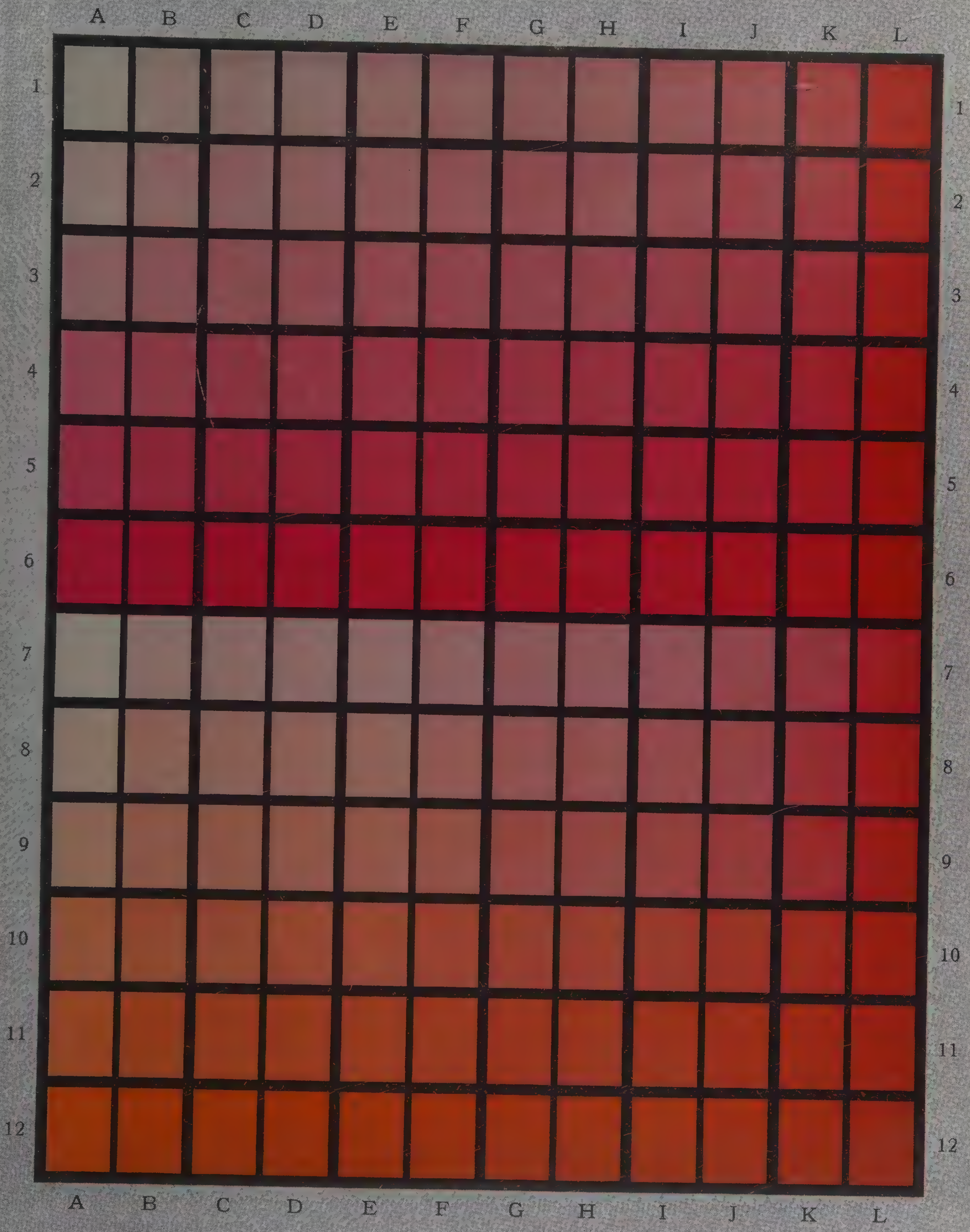
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PLATE 7

	A	C	E	H	J	L	
1						Malaga	1
2	Elephant Skin					Pompeii	2
3				Haematite Red	Old Roseleaf	Anatolia	3
4						Akbar+	4
5		Sultana Old Amethyst+	Mauverose	Aubusson	Tapestry Red	Algerian Red Crimson Maple−	5
6			Canyon−	Peony Burmese Ruby+	**GARNET**+ Spanish Wine Pigeon Blood−	India Red Arabian Red+ Red Robbin−	6
7		Bonito Fuscous+		Cedar+	Roan	**MAROON**	7
8	**ROSE GREY**	**MAUVE TAUPE** Copra			Domingo	Mascara	8
9		Chicle Sarouk+	Kaffa Hamptead Brown+	Liver Brown+ Autumn Oak−	Tanagra Castilian Brown Old Cedar−	Kazak Coptic+	9
10	**NEW COCOA** Natal Brown Mahal+	Kermanshah Coconut+ Brown Stone+	**CHESTNUT** Brownstone+	Piccadilly Mauvewood+	Laurel Oak	Kettledrum Manzanita Moro Red+	10
11	**VANDYKE BROWN**^{P}	Auburn Gorevan Tulip Wood− Zuni Brown+	Trotteur Tan Malabar− Mummy Br+ Bay	Casserole Rustic Brown Gingerspice− Eskimo+	Cordova Castellon+	Coromandel Tuscany+	11
12	Cochin Moccasin+ Argus Brown	Kis Kilim Fudge+ **RUSSIAN CALF**− India Tan−	Cocoa Turtle Apache+ Sahara−	Mohawk Etruscan+ Mecca−	Chutney	Caldera	12
	A	C	E	H	J	L	

PLATE 7

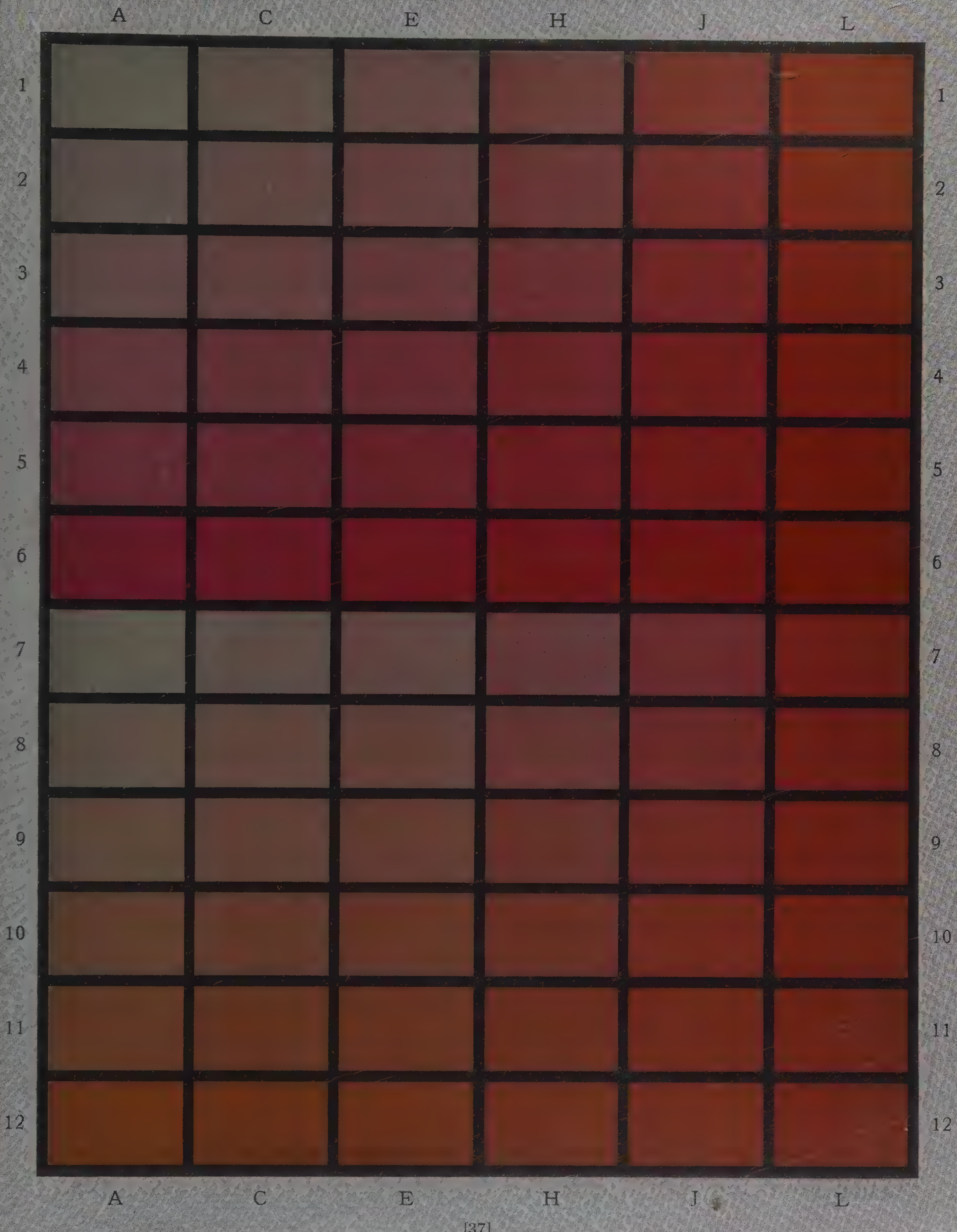
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PLATE 8

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1							1
2							2
3							3
4						Andorra	4
5				Chippendale African Brown + Afghan −	Horsechestnut	Zanzibar	5
6		Ambulance	Rose Ebony	Granada Morro − Armada +	Briarwood −	Mirador Argentina + Art Brown +	6
7			Lava −		Liberia +	Carbuncle +	7
8		Chaetura Black	**AFRICAN** +	**CORDOVAN** Woodland Brown	Java Brown	Brazil Brown −	8
9	Hudson Seal	London Smoke +	**NEGRO**	Rembrandt	Hindu Galleon +	Maracaibo Domingo Brown −	9
10	**SEPIA**^{P}	Moose	**SEAL**	**CHOCOLATE**	Falcon Muskrat +	Java + Nomad Brown −	10
11	Wren	Bark Mocha +	Piccaninny Perique + Otter −	Conga +	Montella	**LEAF MOLD** Kolinsky Weathered Oak −	11
12	**AUTUMN**	Bracken	Broncho Old English Br +	Cattail Café Noir −		Mandalay Friar +	12
	A	C	E	H	J	L	

PLATE 8

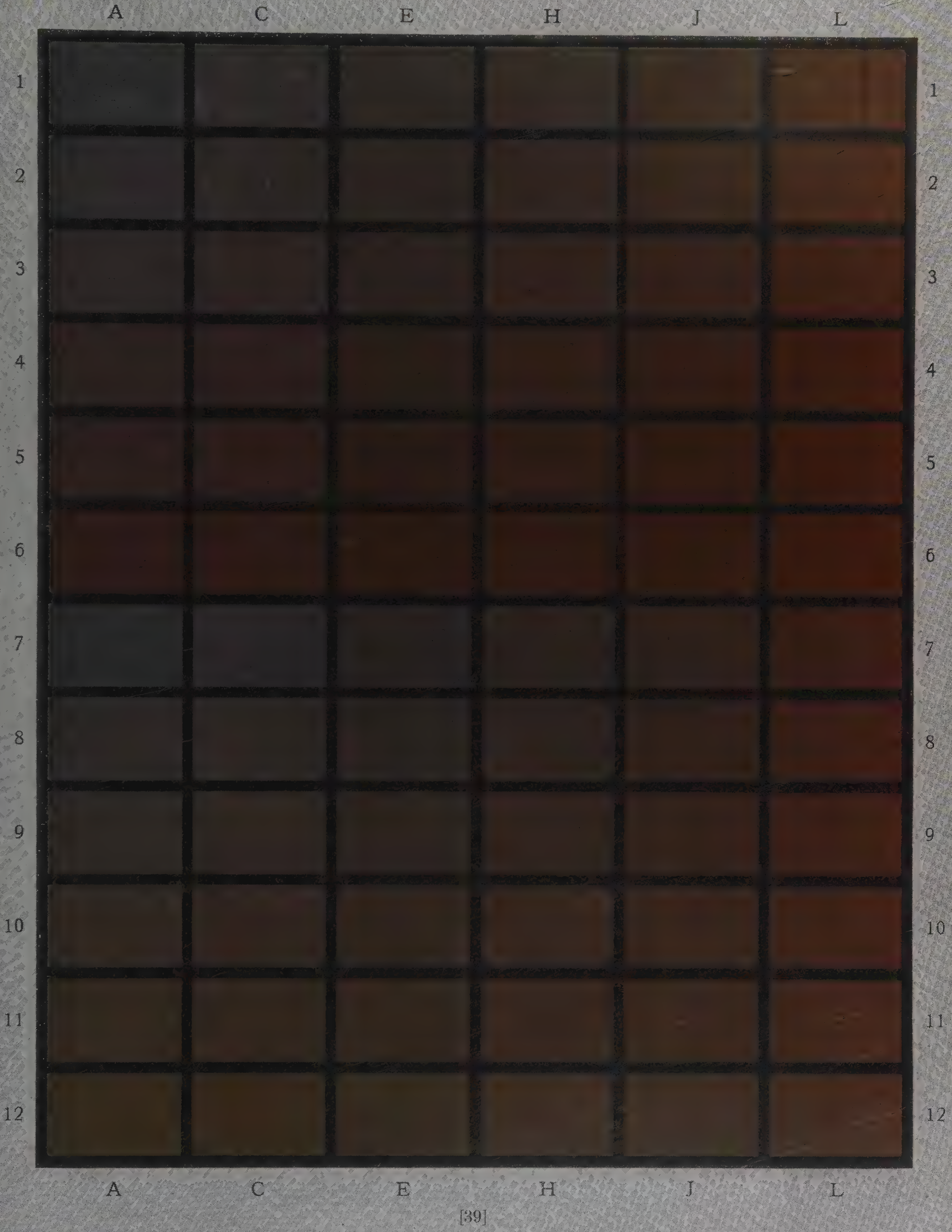
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PLATE 9

	A	B	C	D	E	F	G	H	I	J	K	L	
1									Martius Y				1
2		**POLAR BEAR**		**CREAM**						Pinard Y.	**CHROME LEMON^{P}**		2
3										**POPCORN**	Empire Y.		3
4			Burnous								**JASMINE**	Sunflower Dandelion	4
5	**PEACH**				Capucine Buff					Jonquil	Apricot Y.		5
6	Cherub Orient Pk								Golden Corn		Forsythia	Golden Glow	6
7		Trianon										Cavalry **DEEP CHROME Y^{P}**	7
8	Du Barry Bittersweet Pk	**HONEYDEW**	Ceres						Capucine O	Genista	Capucine Y	**CADMIUM Y^{P}**	8
9										Mikado O	Sunkiss		9
10		Kyoto			Moresco							Marigold **CADMIUM O^{P}**	10
11		Tokyo									**PRINCETON O**		11
12				Chinese O^{P} Japanese Y.^{P}	Capucine R							**GOLDEN POPPY**	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 9

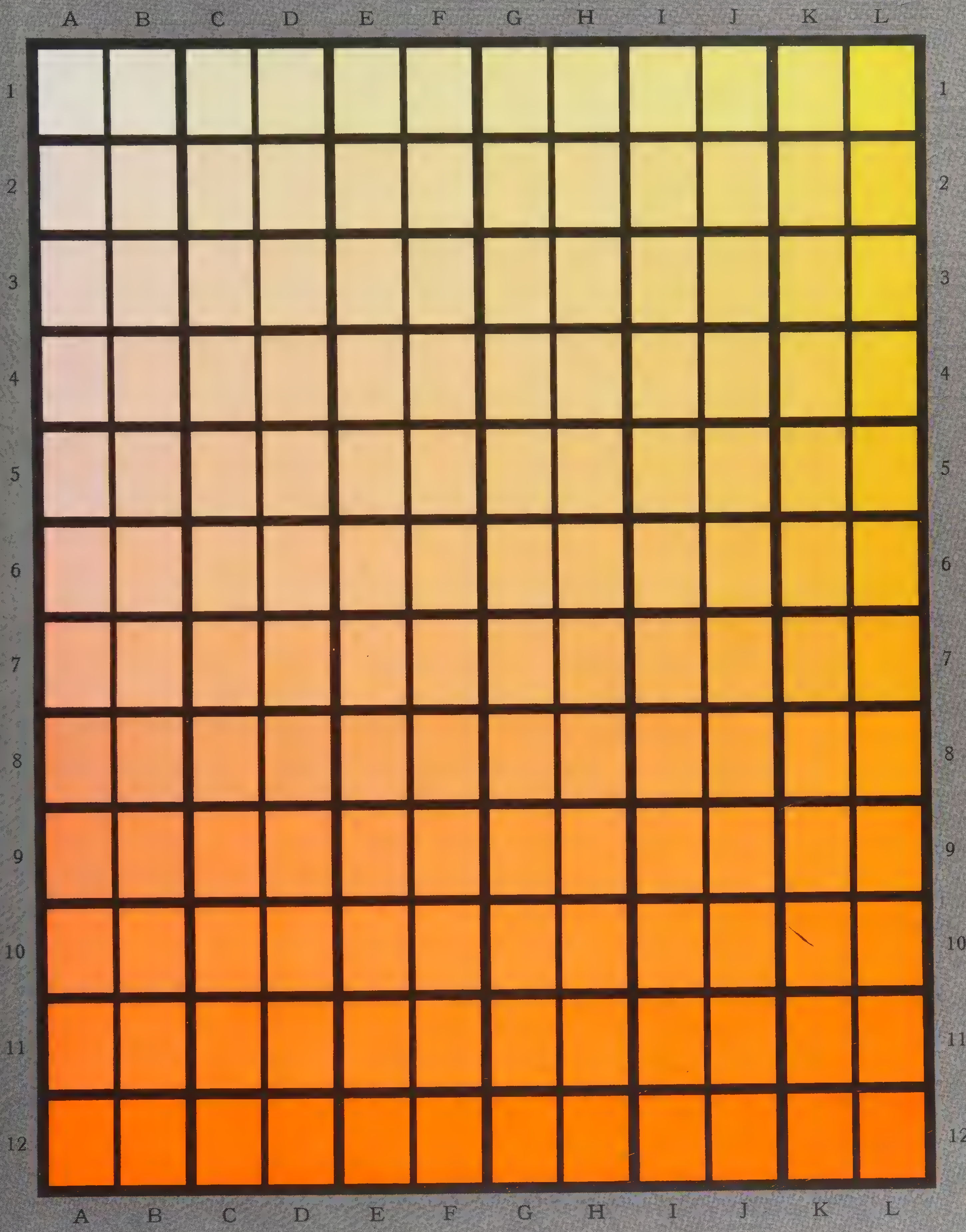


PLATE 10

	A	B	C	D	E	F	G	H	I	J	K	L	
1		Oyster White+	Marguerite Y.						Reed Y.	**SULPHUR Y** Citrus			1
2	White Jade+ Tilleul-Buff+	**IVORY**				**STRAW**	Colonial Buff+	Cockatoo		Citron Y+ Mimosa		Aureolin^{P}	2
3		Caen Stone Freestone+ Bath Stone	Vanilla	**LEGHORN**		Nankeen	Cornsilk			Amber Y.	**LEMON Y** Yellow Daisy+		3
4			**SUNSET**					Sunlight	Pond Lily	**PRIMROSE Y** Snapdragon	Narcissus	**LIGHT CHROME Y.**^{P}	4
5		Peach Blow+					**MAISE**			Corn		Primuline Y. Yolk Y. **GOLDEN ROD**	5
6		Sugar Cane			Cornhusk				Mellowglow	Daffodil Sunray	Chinese Y.	Ta-Ming	6
7	**SALMON**		Sunrise Y			**APRICOT**				Mirabelle	Snowshoe	**SPANISH Y.** **GOLDEN Y.**	7
8											Saffron Y	Florida Gold	8
9									Jacinthe	Cowslip	Sunburst		9
10	Rufous											Orange-peel	10
11			Carrot R.					Pumpkin				Tangier	11
12			Navaho								**CHROME OP**	Big 4 Y	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 10

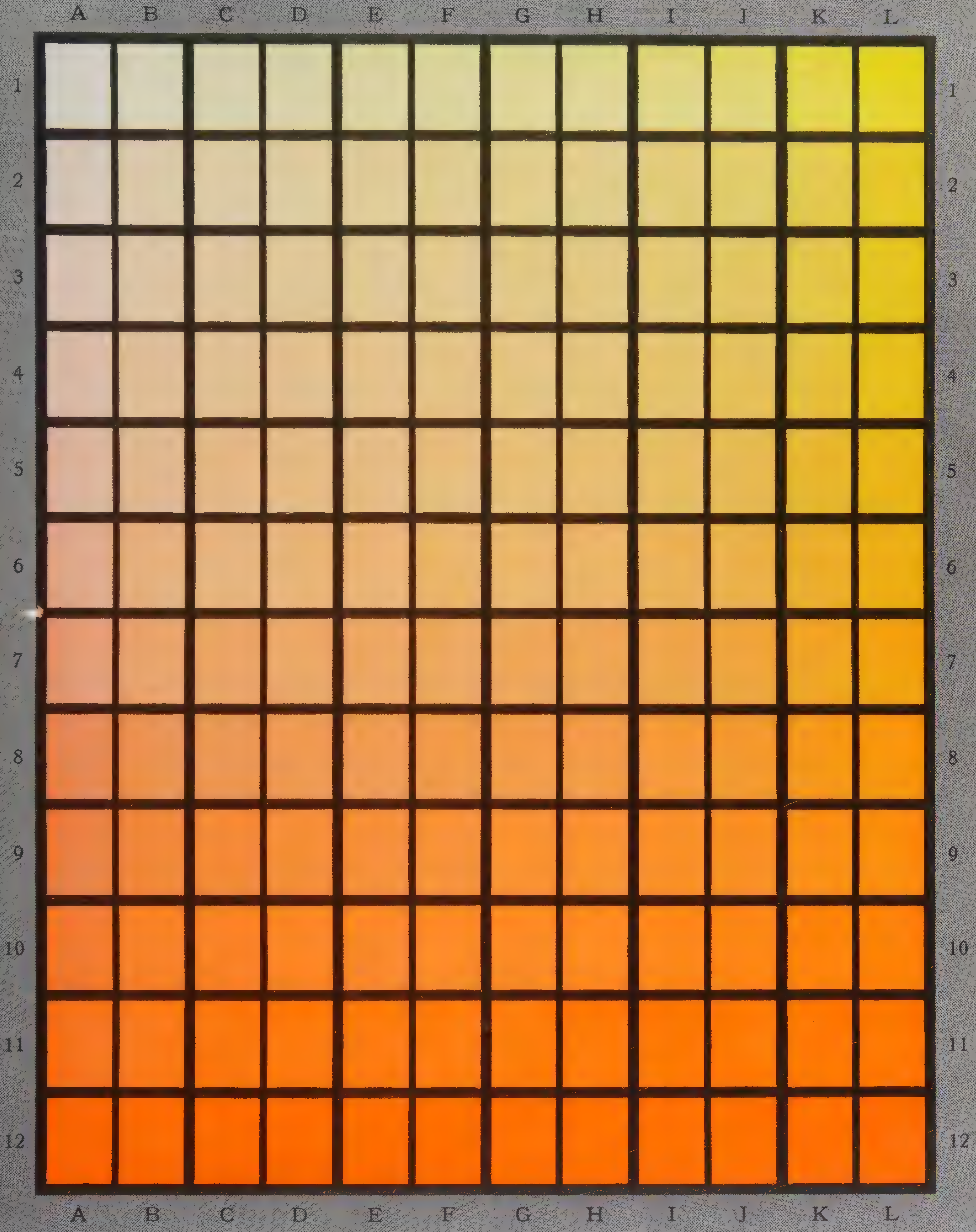
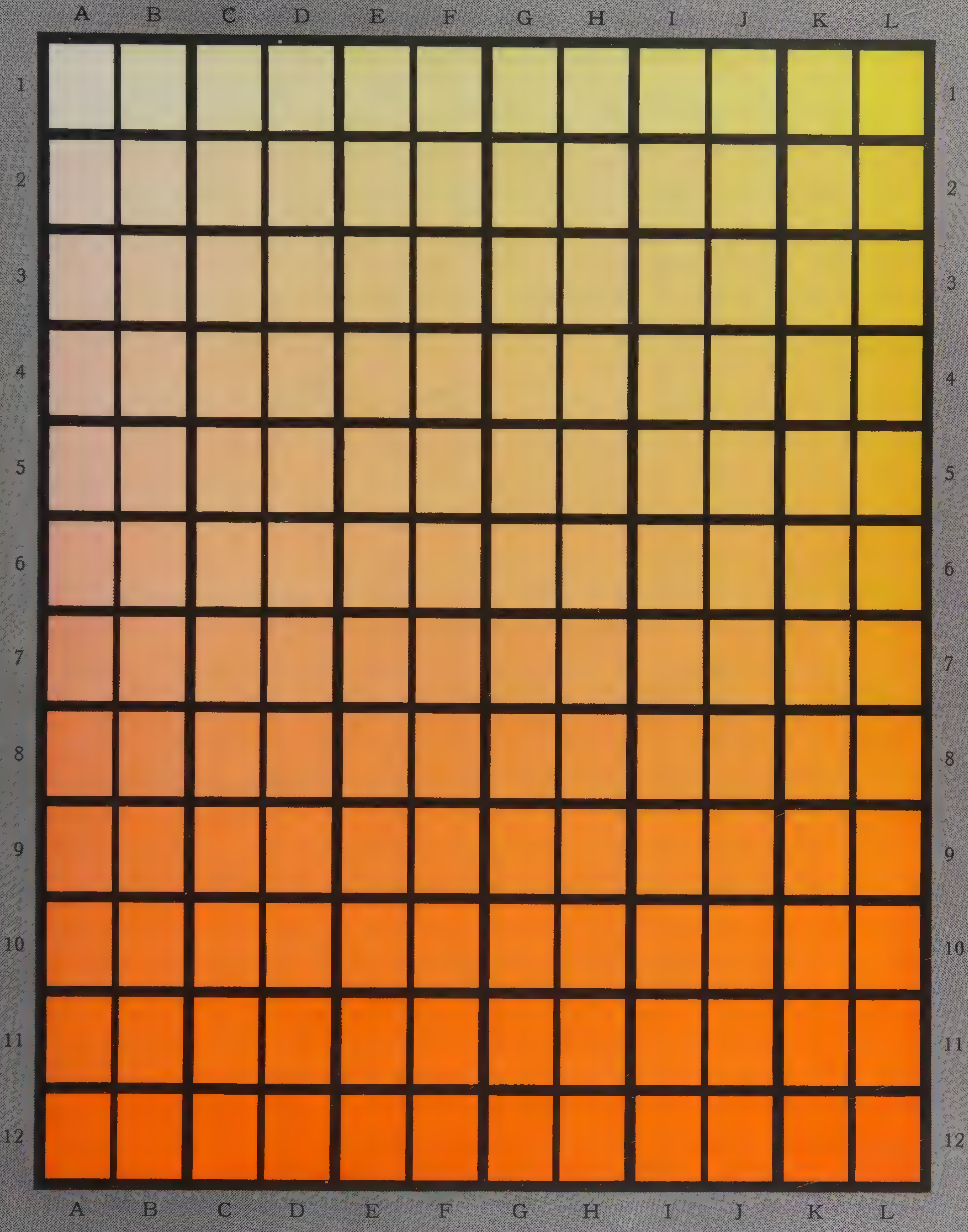


PLATE 11

	A	B	C	D	E	F	G	H	I	J	K	L	
1		**NEW SILVER**+	Amber White						Chartreuse Y−		Acacia	**CHARTREUSE**	1
2	**FLESH** Natural **MOONLIGHT**+	**PUTTY** Seed Pearl Cartridge Buff−	**ECRU** **BEIGE**	Italian Straw					Malmaison	Pineapple+		Pyrethrum Y.	2
3	**BISQUE**	**CHAMPAGNE**+ Belleek	Sheepskin Moth+								**COLONIAL Y**	Canary Y Quince Y	3
4	**NUDE** Seasan+	Beige Soirée Mirage+		Sombrero	**MAPLE**					Mustard	Glint o' Gold	Wax Y	4
5	Pastel Parchment Rose Nude+	Pâté Shell **GRAIN**+	Sweetmeat		Raffia				**CHAMOIS**	Buttercup	Banana Sunbeam	Lime Y	5
6	**BLUSH** Peach-beige−	Sundown Yosemite+	**DORADO** Honey Beige+							Honeysweet	Rattan	Brass	6
7	Onion-skin Pink+	Toltec	Auteuil	Golden Wheat						Inca Gold	**BUFF**	**YELLOW OCHRE**^{P}	7
8	Muskmelon									Saratoga	Gold Leaf	Nugget Bronze Y	8
9											Doubloon Roman Ochre^{P}		9
10													10
11												Ponce de Leon	11
12		**MANDARIN O**						Marathon				O. Rufous	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 11



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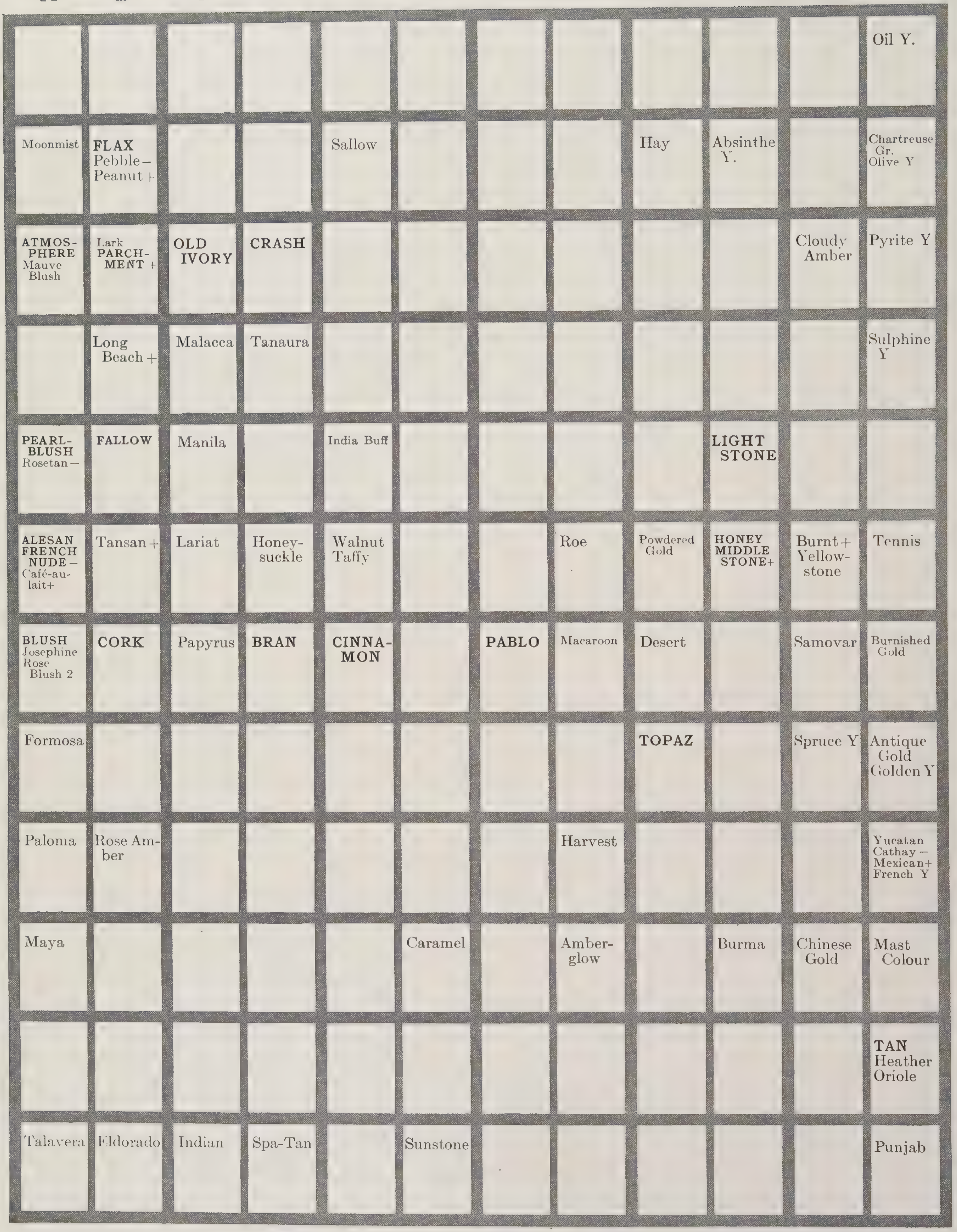

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1												Oil Y.
2	Moonmist	**FLAX** Pebble– Peanut +			Sallow				Hay	Absinthe Y.		Chartreuse Gr. Olive Y
3	**ATMOSPHERE** Mauve Blush	Lark **PARCHMENT** +	**OLD IVORY**	**CRASH**							Cloudy Amber	Pyrite Y
4		Long Beach +	Malacca	Tanaura								Sulphine Y
5	**PEARL-BLUSH** Rosetan –	**FALLOW**	Manila		India Buff					**LIGHT STONE**		
6	**ALESAN** **FRENCH NUDE** – Café-au-lait+	Tansan +	Lariat	Honeysuckle	Walnut Taffy			Roe	Powdered Gold	**HONEY** **MIDDLE STONE**+	Burnt + Yellowstone	Tennis
7	**BLUSH** Josephine Rose Blush 2	**CORK**	Papyrus	**BRAN**	**CINNAMON**		**PABLO**	Macaroon	Desert		Samovar	Burnished Gold
8	Formosa								**TOPAZ**		Spruce Y	Antique Gold Golden Y
9	Paloma	Rose Amber						Harvest				Yucatan Cathay – Mexican+ French Y
10	Maya					Caramel		Amberglow		Burma	Chinese Gold	Mast Colour
11												**TAN** Heather Oriole
12	Talavera	Eldorado	Indian	Spa-Tan		Sunstone						Punjab

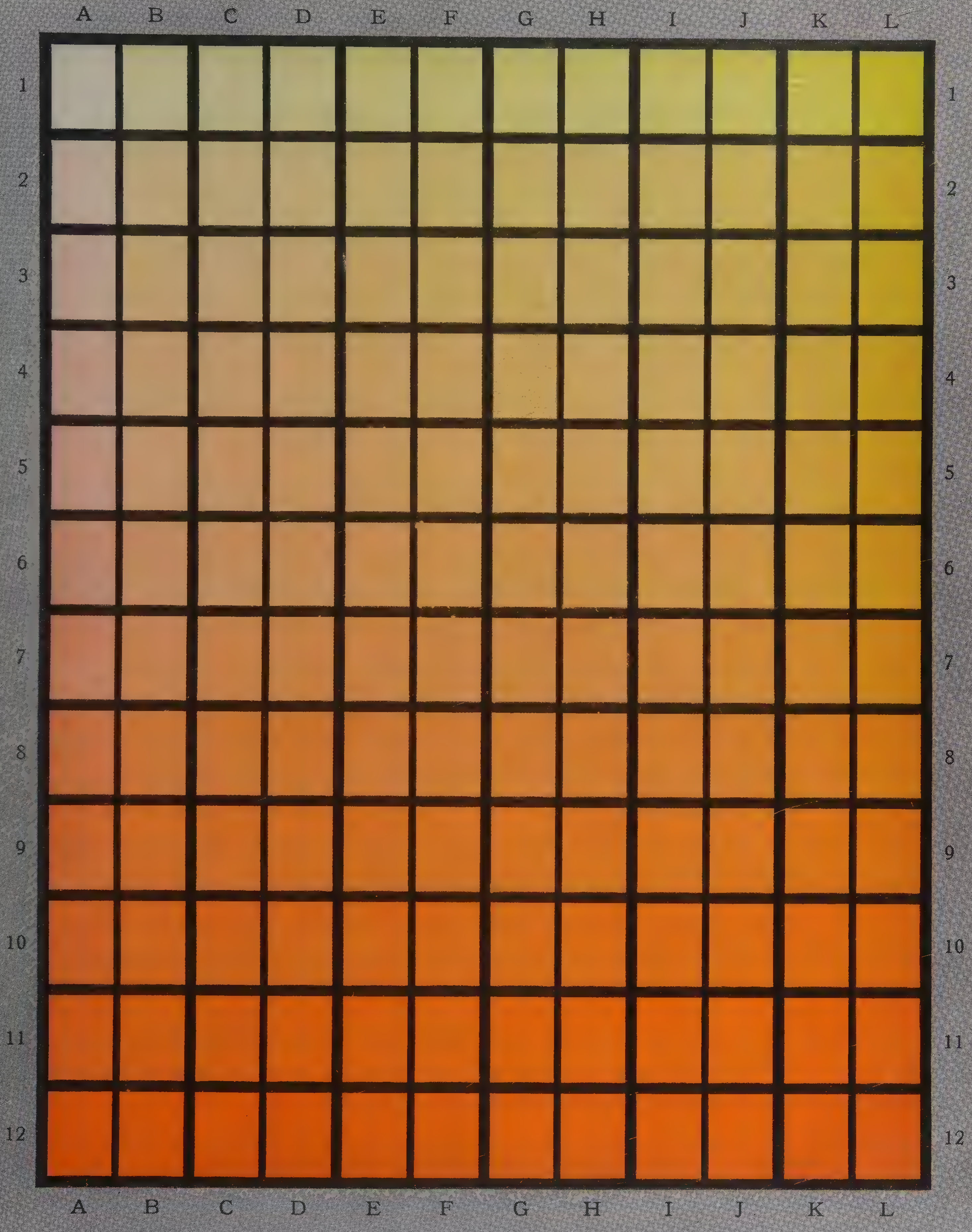
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PLATE 13

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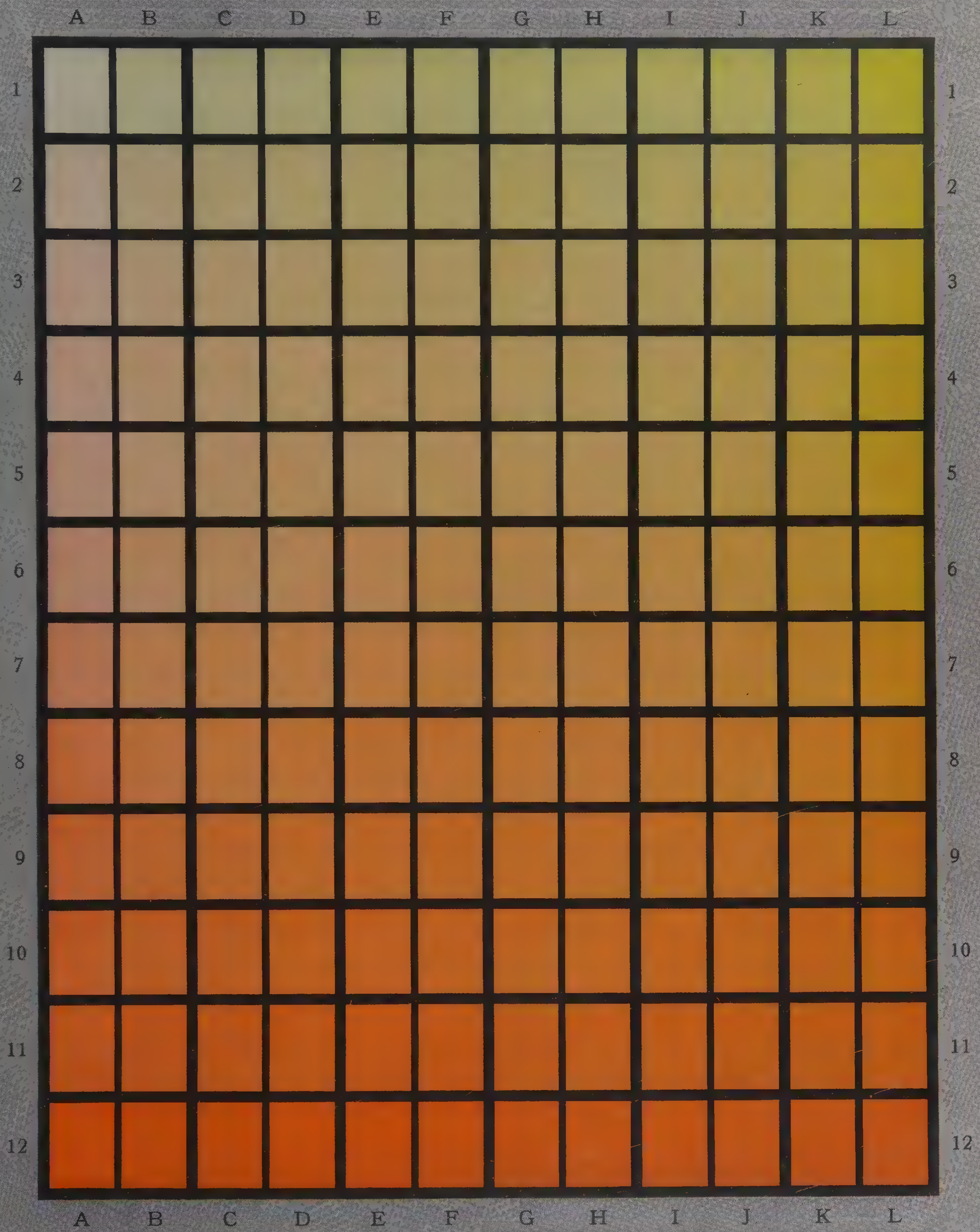
1													1
2	**PIPING ROCK** Grey Stone	**SAND** – Beach Chip+	Lint	Bronze Clair									2
3	Cuban Sand – Folkstone	Biarritz Miami Sand+ Elmwood –	Lido								Olivesheen		3
4	**GRAVEL** Meerschaum +	Seaside Tea Time+	Hamadan Arrowwood+		Sudan								4
5	Nougat Burlwood +	Mavis **GRAIN** – Pecan+			Mastic							Bistre Gr	5
6	Tawny Birch Sandstone + Cream Beige –	**ALMOND BISCUIT**+ Pawnee + Doe	Polo Tan Morocco Sand+	**CRACKER**	Arizona	Prairie+							6
7	**FRENCH BEIGE** **SUNBURN** Hopi +	Suntan Merida+ Mayfair Tan –	**ALOMA**+	Oakbuff				Yellow Beige	Bamboo	Khaki	Isabella	Tinsel **DEEP STONE**	7
8	Mindoro +	India Spice Toasted Almond+	Tuscan Tan Sauterne			**TOAST**		Bure	**AZTEC** Indian Tan	Clay	Centennial Br	Buckthorn Br Sumac	8
9	Creole	Wild Honey					Sayal Br			**HAZEL** Noisette Muffin		Chipmunk	9
10	Sonora			Tawny			Pekinese					**RAW SIENNA**^{P}+	10
11	Titian Gold			Mango						Sorrel	Martinique	Peruvian Br.	11
12		Spice					**WINDSOR TAN**			Titian	Amber Br.	Gold Pheasant	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 13



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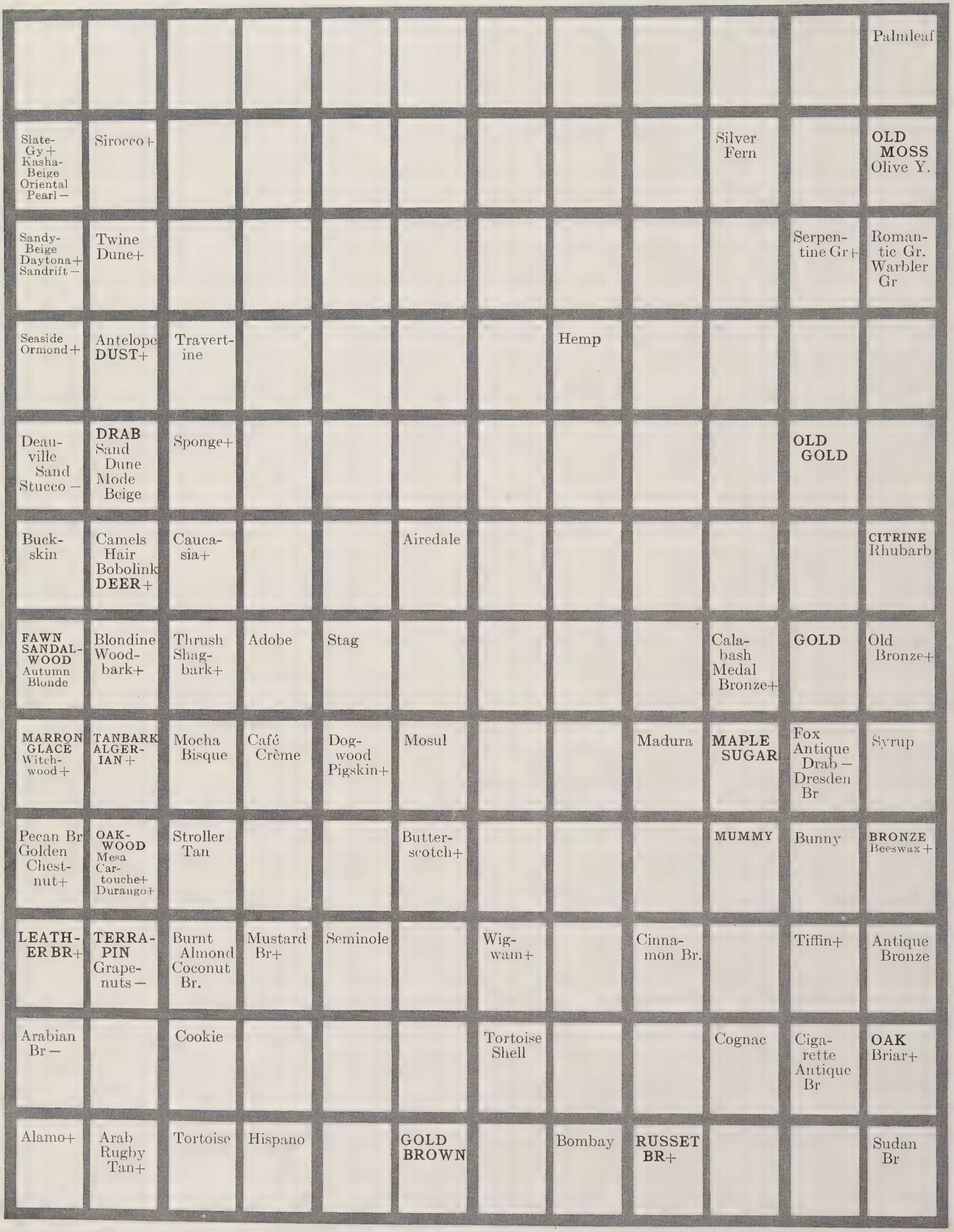

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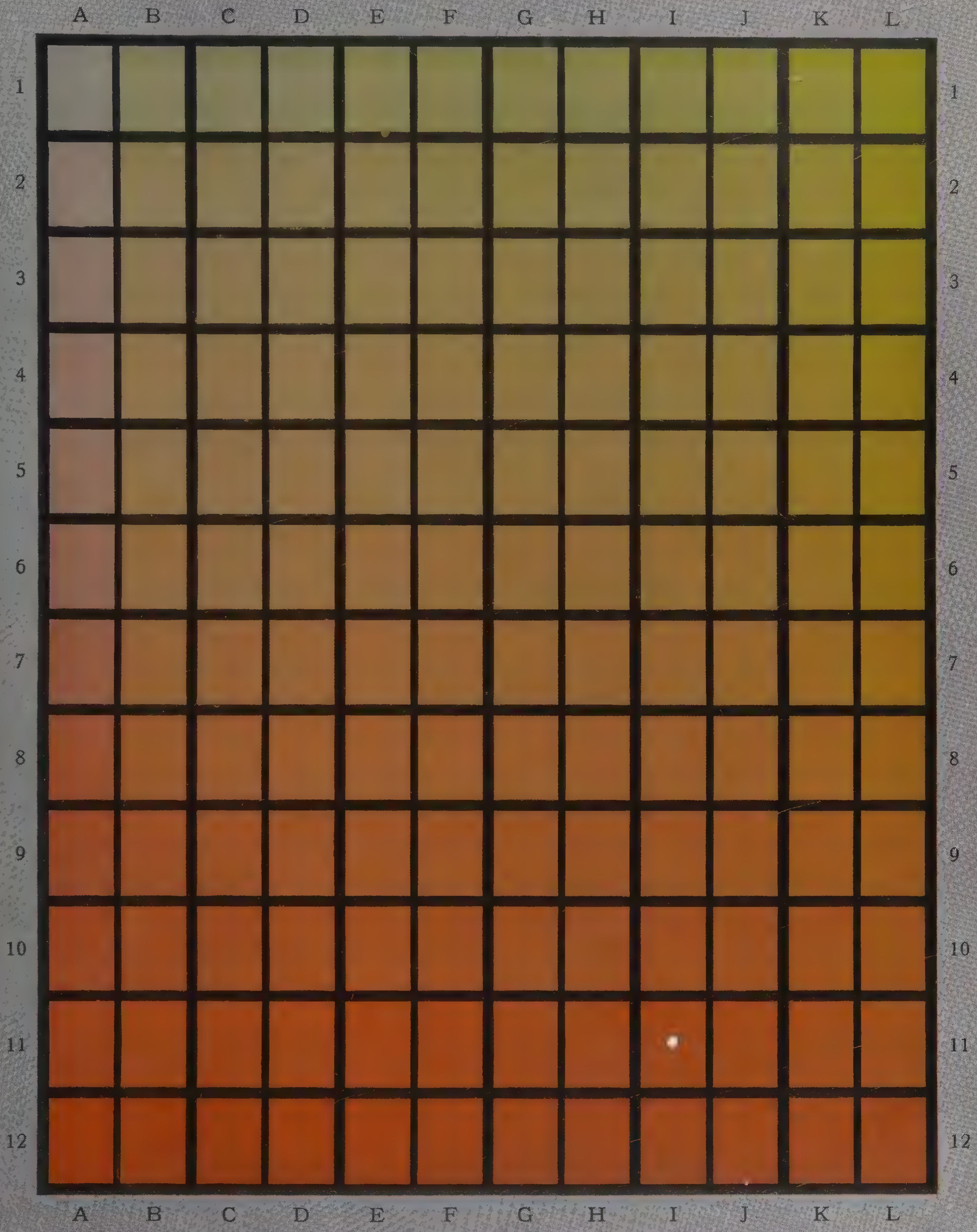
1												Palmleaf	1
2	Slate-Gy+ Kasha-Beige Oriental Pearl−	Sirocco+								Silver Fern		**OLD MOSS** Olive Y.	2
3	Sandy-Beige Daytona+ Sandrift−	Twine Dune+									Serpentine Gr+	Romantic Gr. Warbler Gr	3
4	Seaside Ormond+	Antelope **DUST**+	Travertine					Hemp					4
5	Deauville Sand Stucco−	**DRAB** Sand Dune Mode Beige	Sponge+								**OLD GOLD**		5
6	Buckskin	Camels Hair Bobolink **DEER**+	Caucasia+			Airedale						**CITRINE** Rhubarb	6
7	**FAWN** **SANDALWOOD** Autumn Blonde	Blondine Woodbark+	Thrush Shagbark+	Adobe	Stag					Calabash Medal Bronze+	**GOLD**	Old Bronze+	7
8	**MARRON GLACÉ** Witchwood+	**TANBARK** **ALGERIAN**+	Mocha Bisque	Café Crème	Dogwood Pigskin+	Mosul			Madura	**MAPLE SUGAR**	Fox Antique Drab− Dresden Br	Syrup	8
9	Pecan Br Golden Chestnut+	**OAKWOOD** Mesa Cartouche+ Durango+	Stroller Tan			Butterscotch+				**MUMMY**	Bunny	**BRONZE** Beeswax+	9
10	**LEATHER BR**+	**TERRAPIN** Grapenuts−	Burnt Almond Coconut Br.	Mustard Br+	Seminole		Wigwam+		Cinnamon Br.		Tiffin+	Antique Bronze	10
11	Arabian Br−		Cookie				Tortoise Shell			Cognac	Cigarette Antique Br	**OAK** Briar+	11
12	Alamo+	Arab Rugby Tan+	Tortoise	Hispano		**GOLD BROWN**		Bombay	**RUSSET BR**+			Sudan Br	12
	A	B	C	D	E	F	G	H	I	J	K	L	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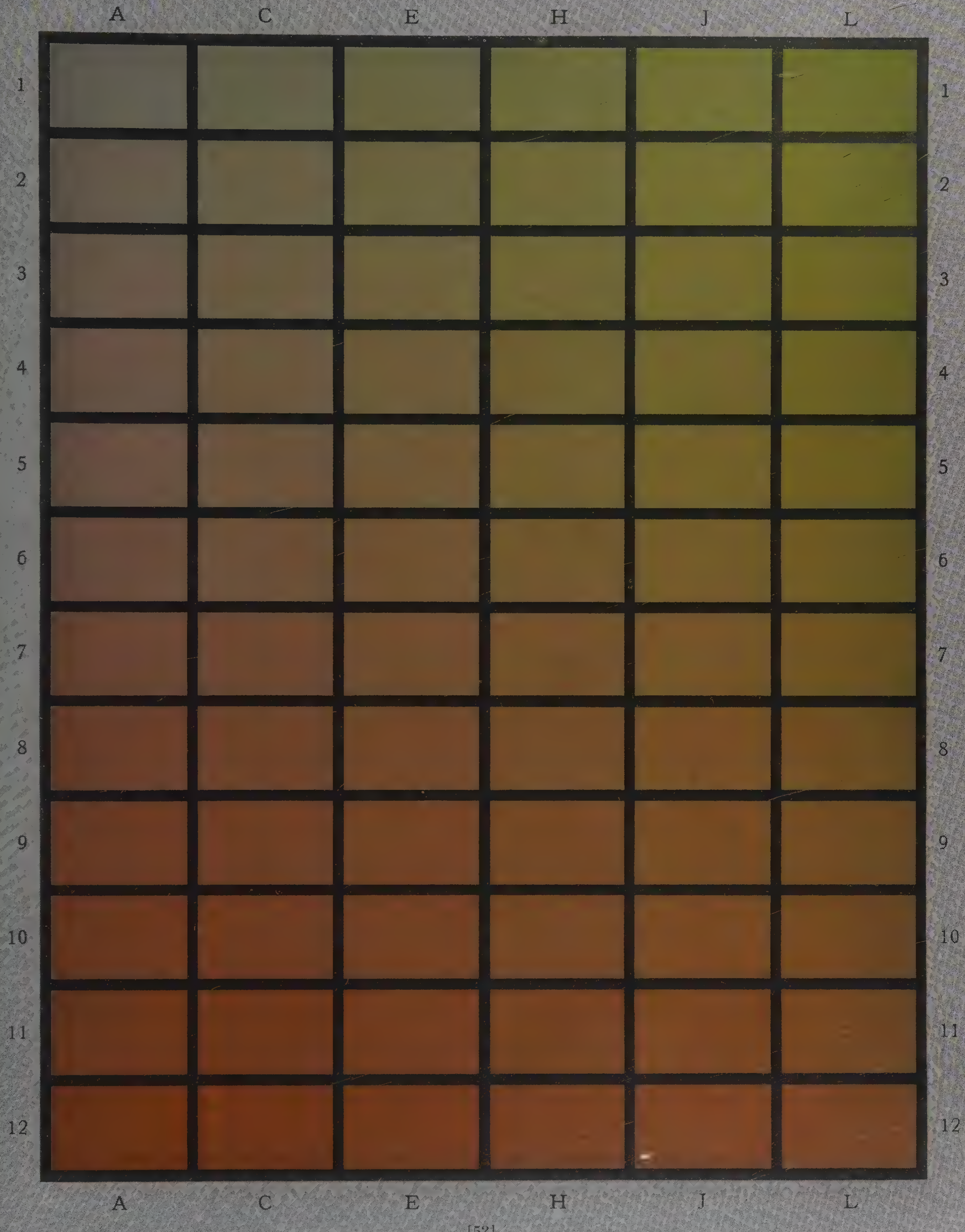
	A	C	E	H	J	L
1		Cub				
2	Traprock + Seabird −	English Grey Crag +				
3	Nutria Grège Beaverpelt	Métallique −				
4	Limestone Argali Hair Brown Quail +	Pelt + Pampas	Beech			**OLIVE GREEN**
5	Log Cabin +	Goat Rabbit − Loam + Plover +			**OLIVE DRAB**	Roman Green
6	**BEAVER** Mushroom Camel + Starling −	**GREY 31** Sparrow Sakkara + Boulevard − Mouse +				Metallic Green^{T}
7	Soapstone Beechnut − Pony Brown − Brushwood +	Racquet Gazelle − Grouse +	**ACORN** Meadowlark +	Olive Brown Bronze Nude +		Willow +
8	Winter Leaf Cashew Nut − Beach Tan − Sedge +	Chukker Brown Tamarack +	Sphinx Mustang +	Rubber +		
9	Santos Praline − Nutmeg **DARK BEAVER+**	Teakwood Pinecone +				
10	English Oak Circassian +	Madrid Saddle +	**OLIVE WOOD** Collie			Whippet
11	Coffee	Malay **COCOA BROWN +** Pueblo+	Cowboy **NEW BRONZE+** Brussels Brown	Brown Sugar		Buffalo
12	**BURNT UMBER**^{P}	Clove Manchu Sherry Brown+ Rangoon −				Partridge **RAW UMBER**^{P}

PLATE 15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	A	C	E	H	J	L	
1		Gargoyle					1
2	**SMOKE BROWN** Asphalt						2
3	Phantom	Rodent					3
4	**ROSE TAUPE**	Guinea Hen					4
5	Bear Chaetura Drab	Rat	Sagebrush Gr				5
6	**TAUPE**	Kangaroo			Beetle		6
7	Eagle Clove Brown					Bronze Green+	7
8	**CASTOR**						8
9	Owl	Bronze Brown				Ivy Green	9
10	Bison –						10
11	Elk Lama –						11
12	Biskra Date –		Bronze Lustre^{T}	Bronzesheen			12
	A	C	E	H	J	L	

PLATE 16

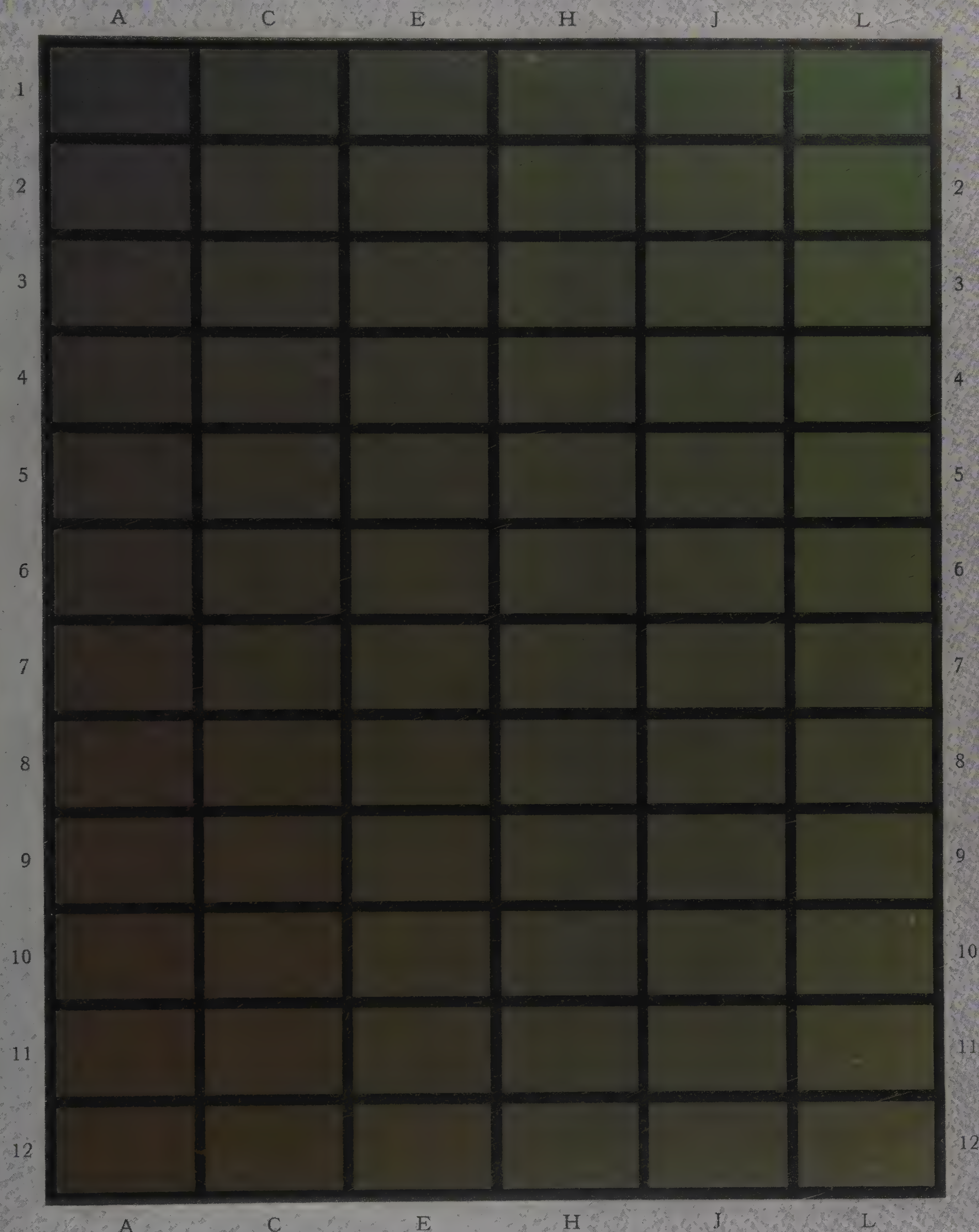
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PLATE 17

	A	B	C	D	E	F	G	H	I	J	K	L	
1													1
2			Sea-foam Y										2
3												Endive	3
4													4
5													5
6	Opaline Gr								Viridine Gr.				6
7									Rivage Gr			Viridine Y	7
8							Arcadian Gr.		Water Sprite			Neva Gr.	8
9	Seafoam												9
10	Chrysoprase Gr									Peppermint			10
11											Harlequin		11
12													12
	A	B	C	D	E	F	G	H	I	J	K	L	

Plate 17

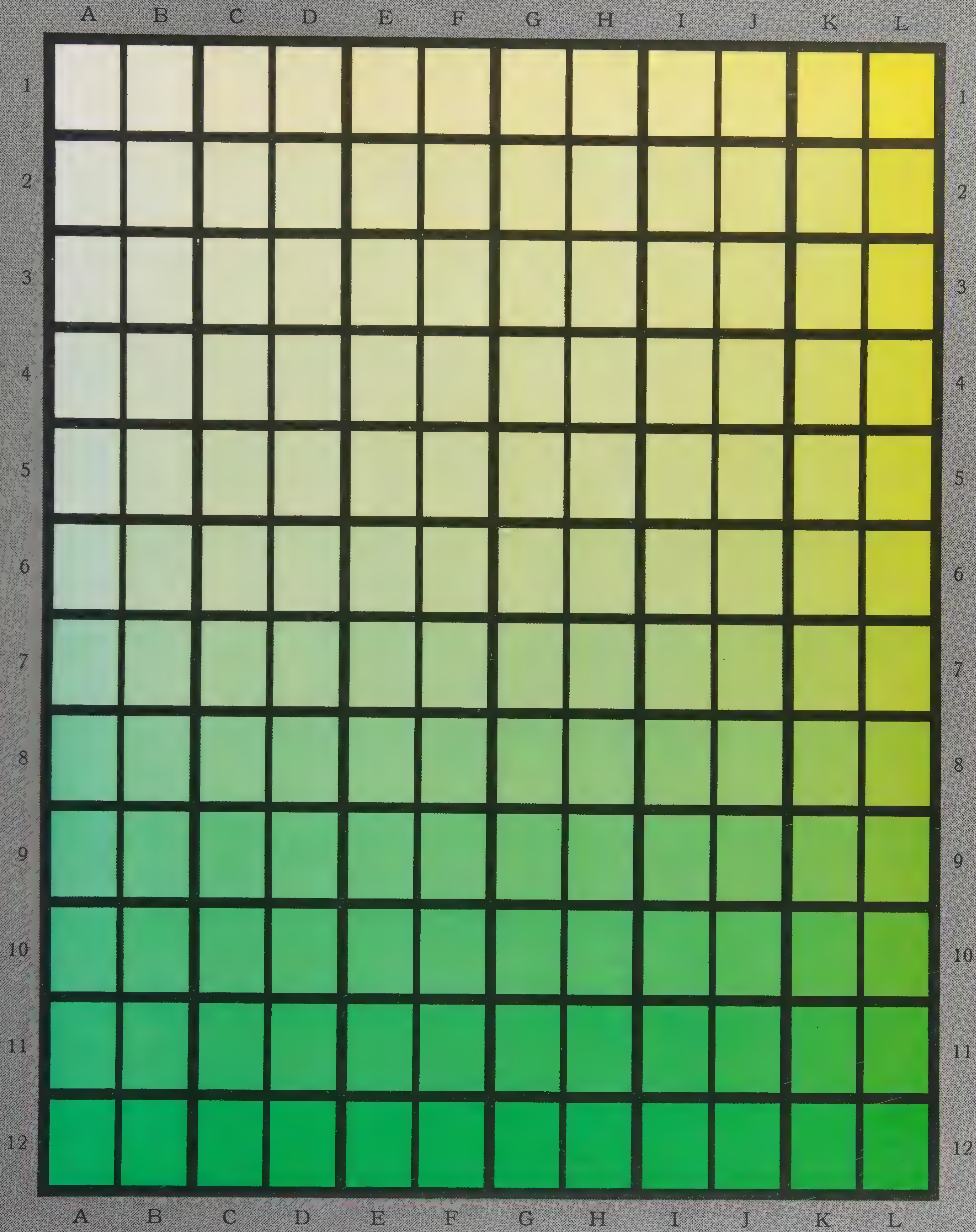

PLATE 18

	A	B	C	D	E	F	G	H	I	J	K	L	
1										Chalcedony Y.			1
2				Sea-foam Gr.								Citronelle	2
3						Glass Gr							3
4													4
5	Oural Gr	**OCEAN GR**							Sky Gr				5
6			Olivine		Tiber Gr.							Love Bird	6
7		**AQUA-GREEN**								**SPRING GR**			7
8		Psyche										Eve Gr	8
9		Paris Gr.											9
10													10
11													11
12													12
	A	B	C	D	E	F	G	H	I	J	K	L	

Plate 18

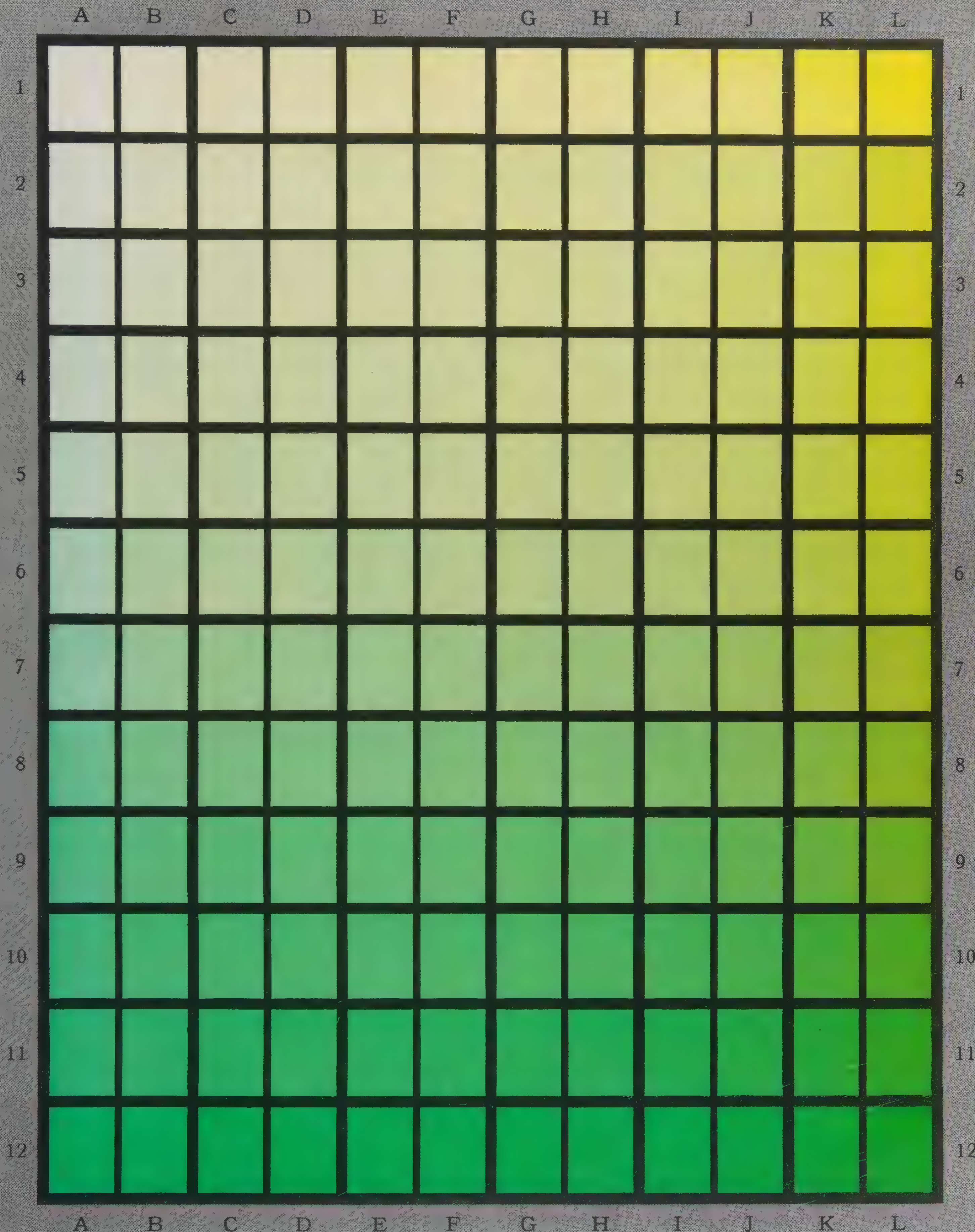
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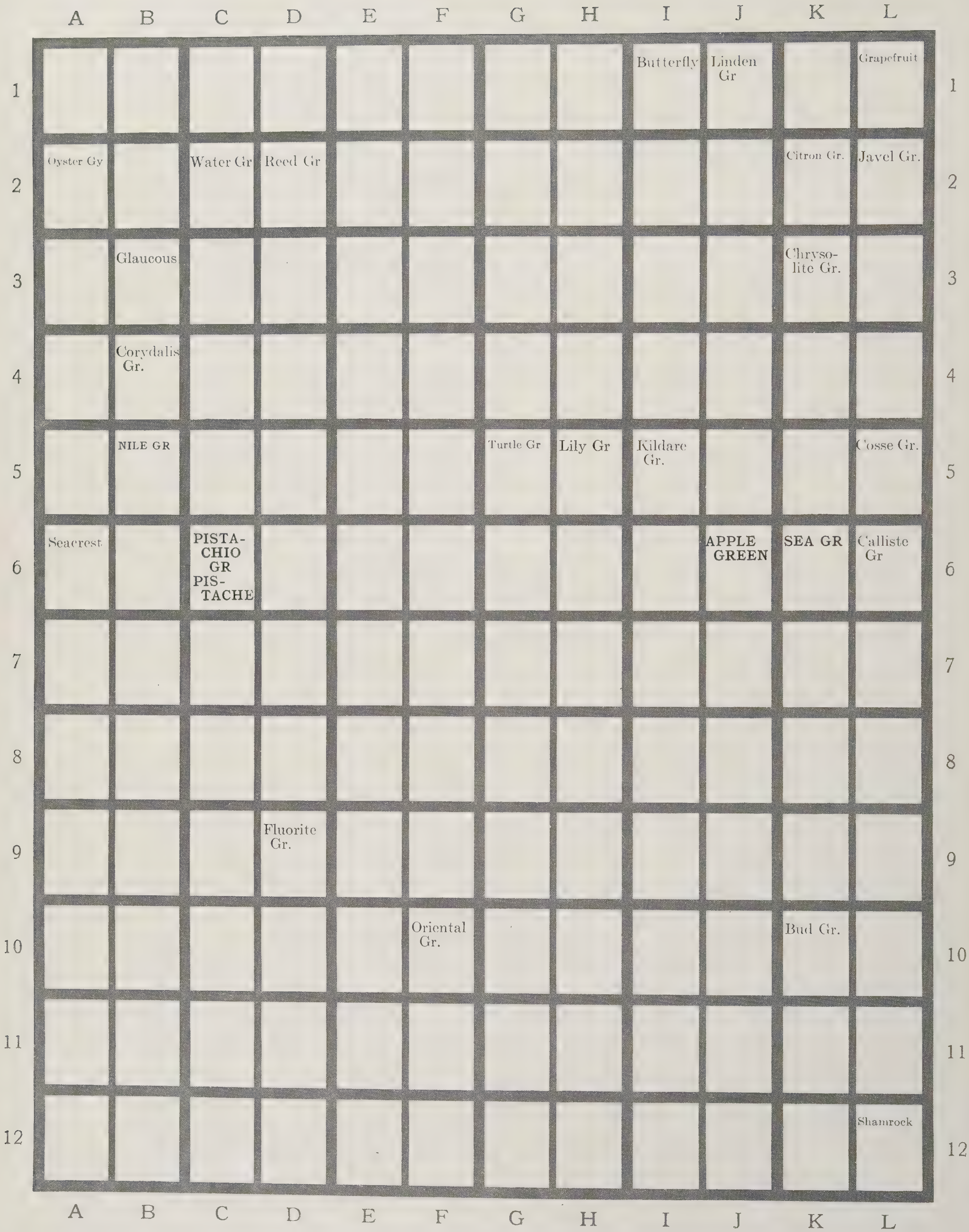
PLATE 19



	A	B	C	D	E	F	G	H	I	J	K	L	
1									Butterfly	Linden Gr		Grapefruit	1
2	Oyster Gy		Water Gr	Reed Gr							Citron Gr.	Javel Gr.	2
3		Glaucous									Chrysolite Gr.		3
4		Corydalis Gr.											4
5		**NILE GR**					Turtle Gr	Lily Gr	Kildare Gr.			Cosse Gr.	5
6	Seacrest		**PISTACHIO GR** **PISTACHE**							**APPLE GREEN**	**SEA GR**	Calliste Gr	6
7													7
8													8
9				Fluorite Gr.									9
10						Oriental Gr.					Bud Gr.		10
11													11
12												Shamrock	12
	A	B	C	D	E	F	G	H	I	J	K	L	

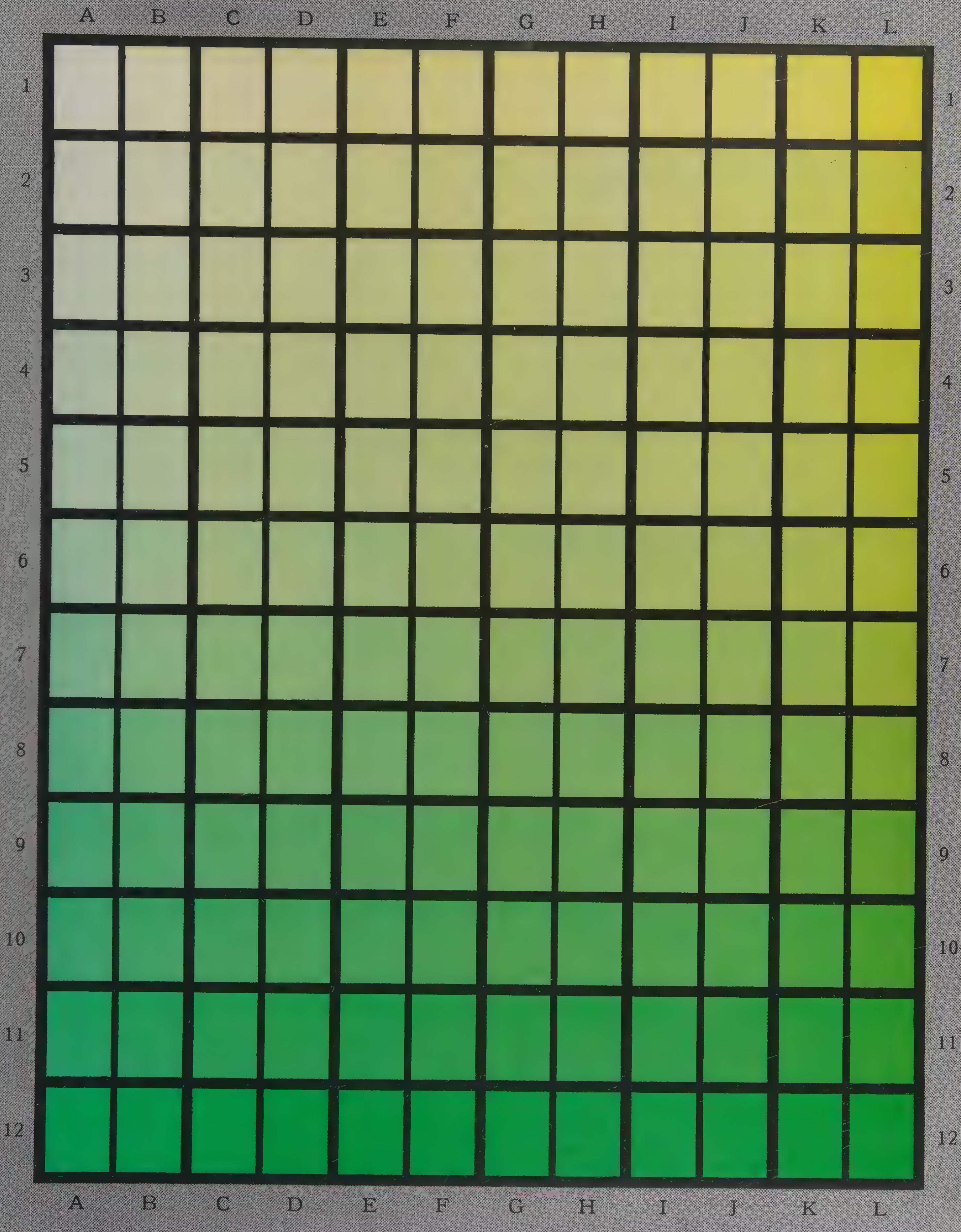

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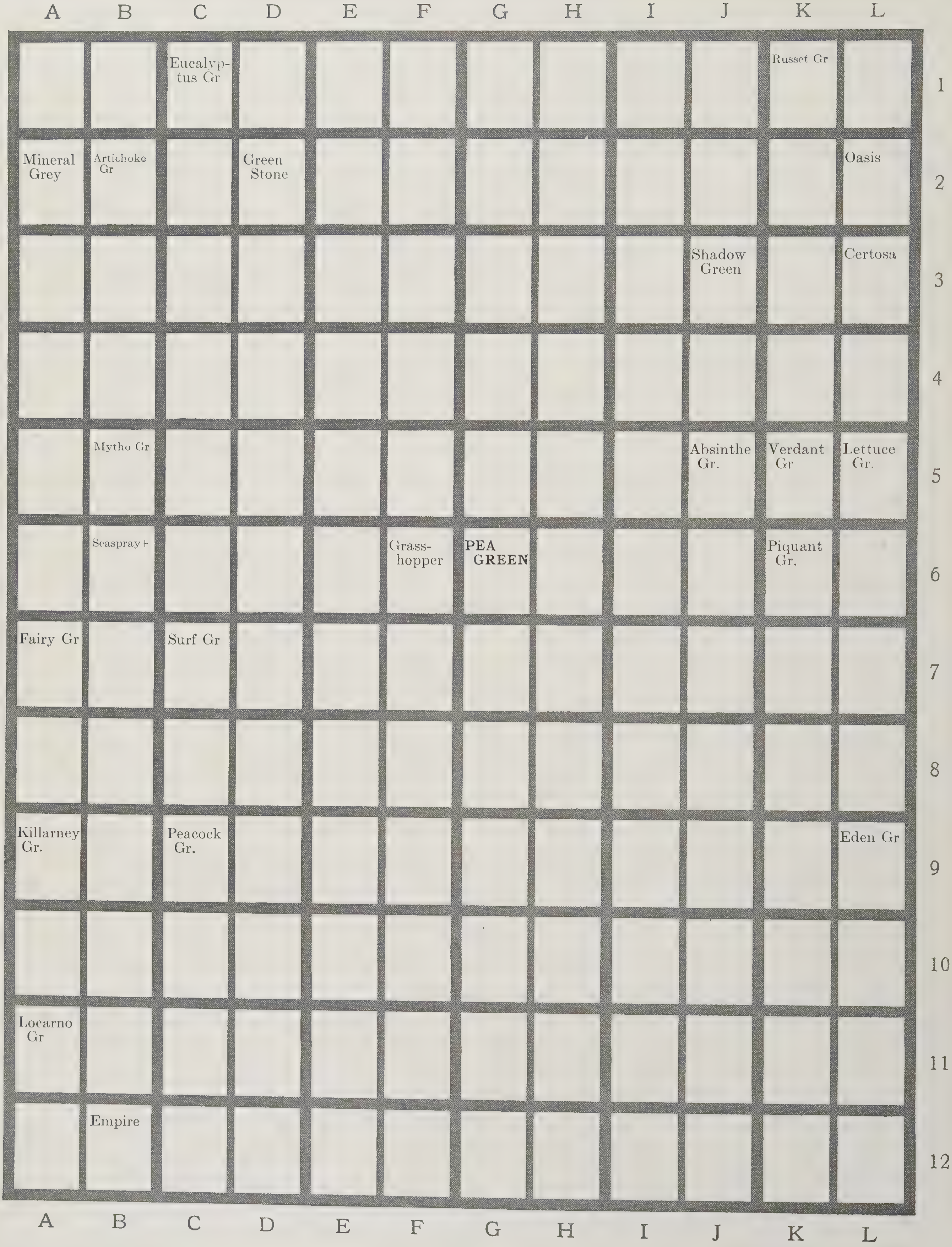
PLATE 20



	A	B	C	D	E	F	G	H	I	J	K	L
1			Eucalyptus Gr								Russet Gr	
2	Mineral Grey	Artichoke Gr		Green Stone								Oasis
3										Shadow Green		Certosa
4												
5		Mytho Gr								Absinthe Gr.	Verdant Gr	Lettuce Gr.
6		Seaspray +				Grasshopper	**PEA GREEN**				Piquant Gr.	
7	Fairy Gr		Surf Gr									
8												
9	Killarney Gr.		Peacock Gr.									Eden Gr
10												
11	Locarno Gr											
12		Empire										

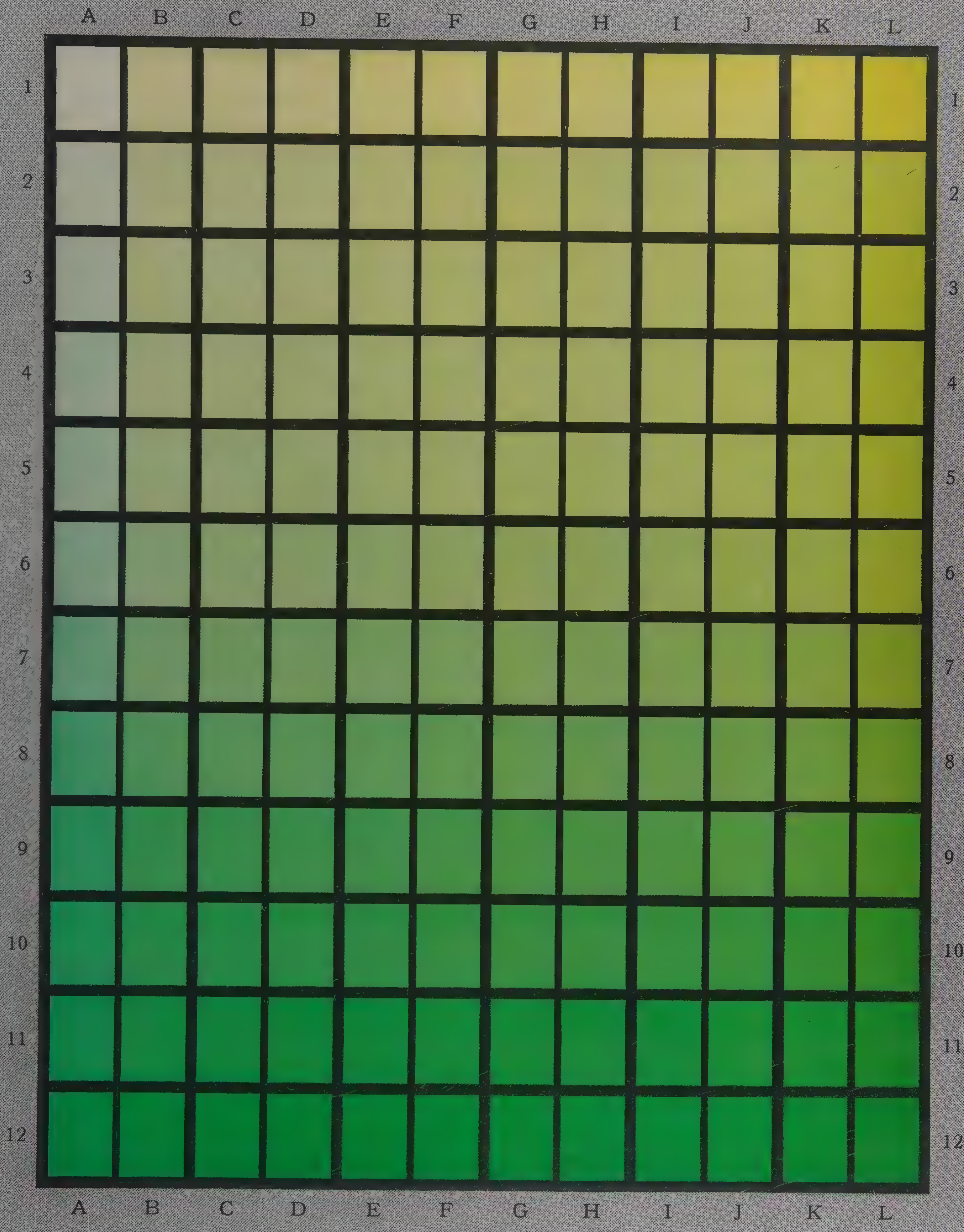

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PLATE 21

	A	B	C	D	E	F	G	H	I	J	K	L	
1		Grey Drab Quaker Gy								Grape Gr			1
2	Olive-Grey + Scotch Gy	**MERMAID**	Tea Gr.									**MOSS GR** +	2
3						Silver Gr						Courge Gr.	3
4											Rainette Gr −		4
5						Fern Gr				Asphodel Gr.	Biscay Gr	**GRASS GR**	5
6										Mignon Gr		Parrot Gr.	6
7		**TARRAGON**							Fern				7
8	Gooseberry Gr	Chromium Ox., Opaq.^{P}											8
9					Winter Gr								9
10													10
11													11
12												Imperial Jade	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 21

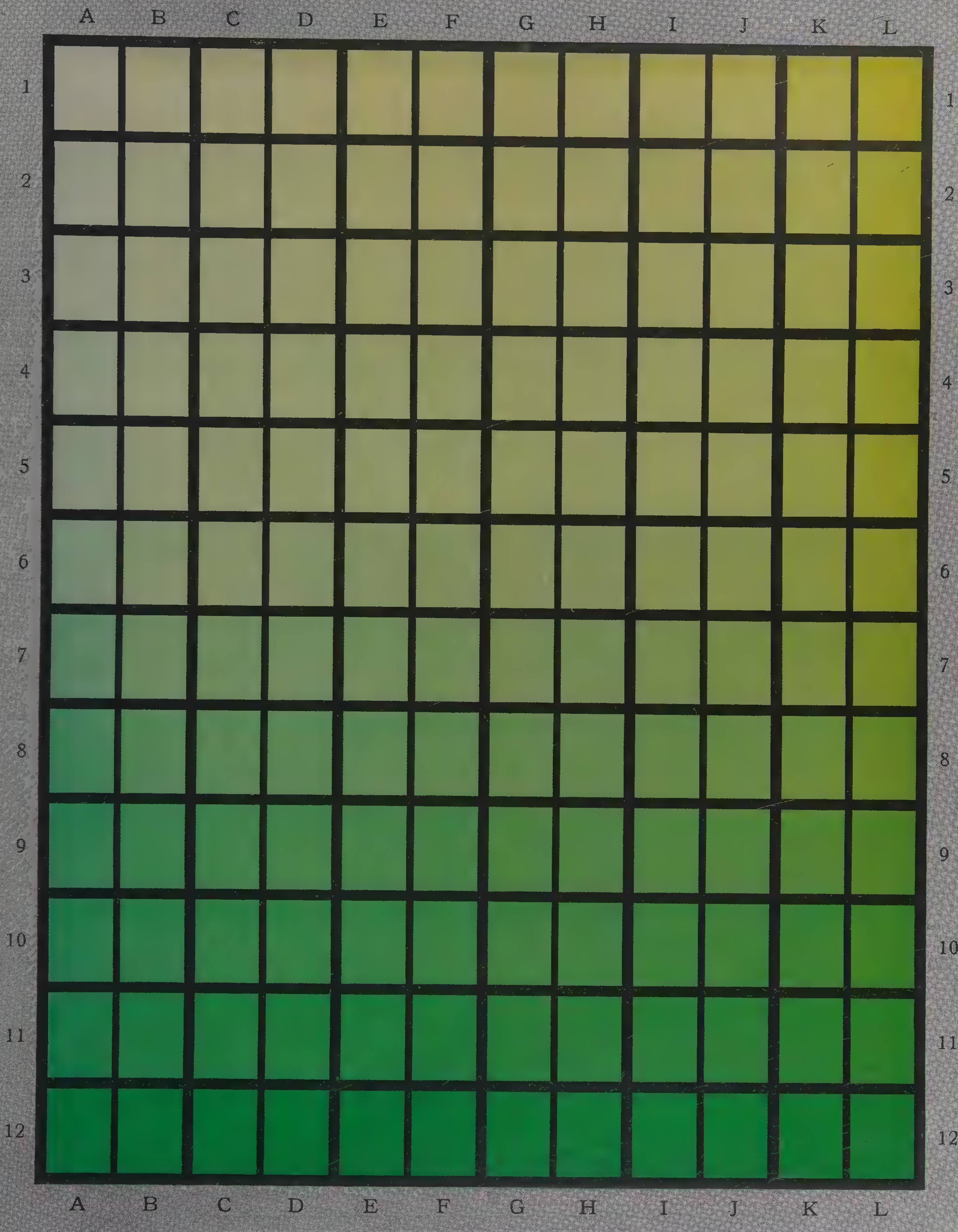
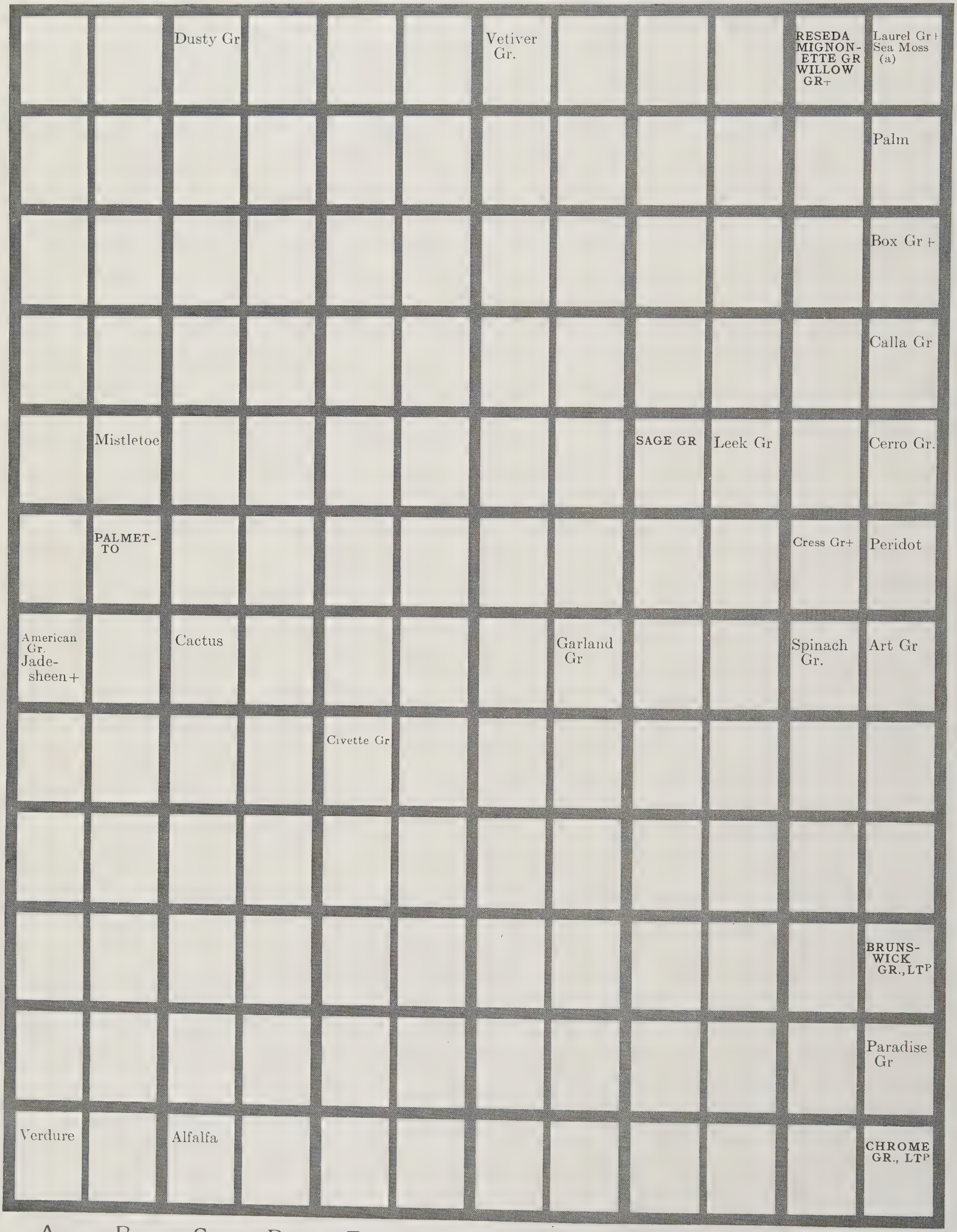


PLATE 22



	A	B	C	D	E	F	G	H	I	J	K	L
1			Dusty Gr				Vetiver Gr.				**RESEDA MIGNONETTE GR** **WILLOW GR+**	Laurel Gr+ Sea Moss (a)
2												Palm
3												Box Gr+
4												Calla Gr
5		Mistletoe							**SAGE GR**	Leek Gr		Cerro Gr.
6		**PALMETTO**									Cress Gr+	Peridot
7	American Gr. Jadesheen+		Cactus					Garland Gr			Spinach Gr.	Art Gr
8					Civette Gr							
9												
10												**BRUNSWICK GR., LT^{P}**
11												Paradise Gr
12	Verdure		Alfalfa									**CHROME GR., LT^{P}**
	A	B	C	D	E	F	G	H	I	J	K	L

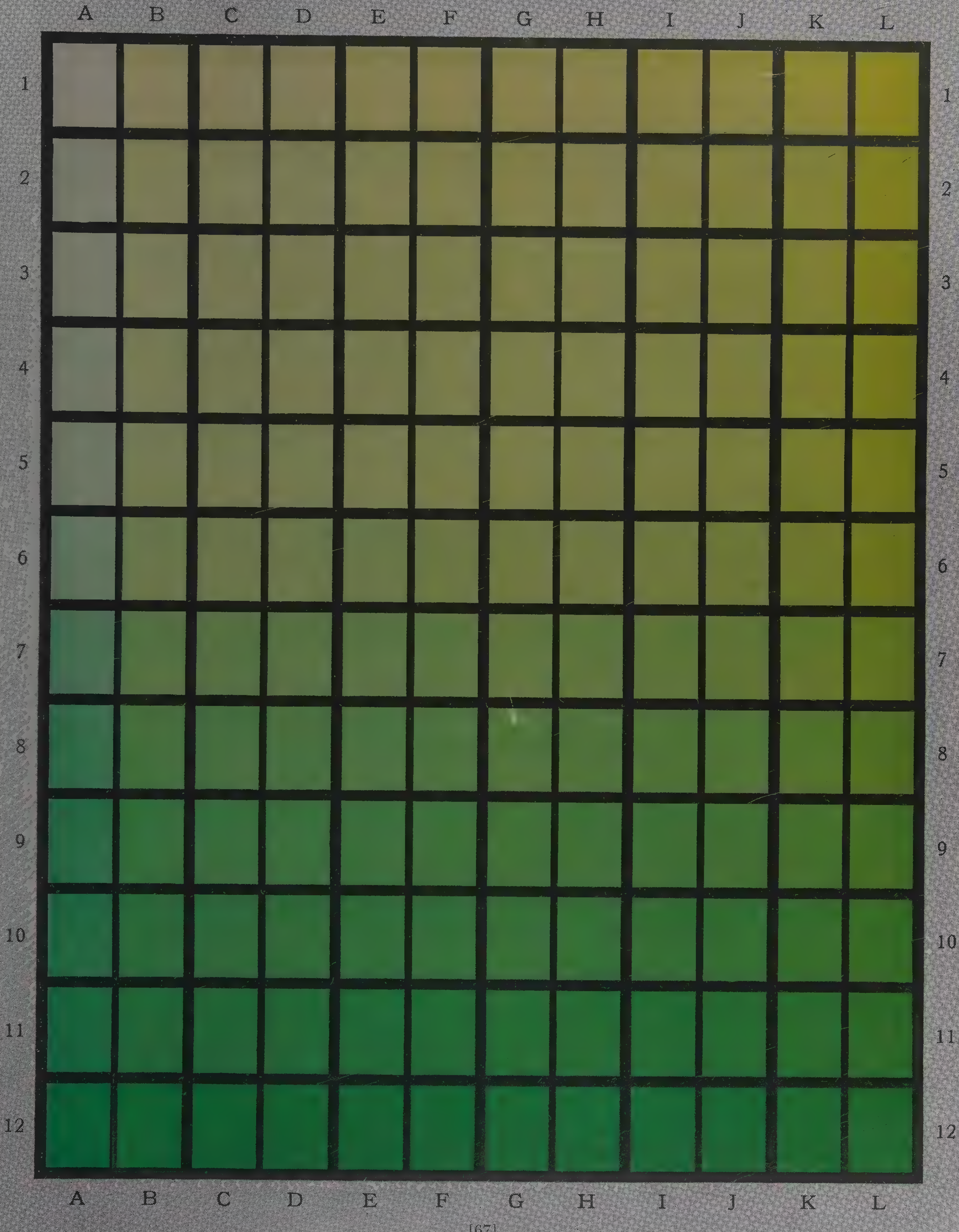

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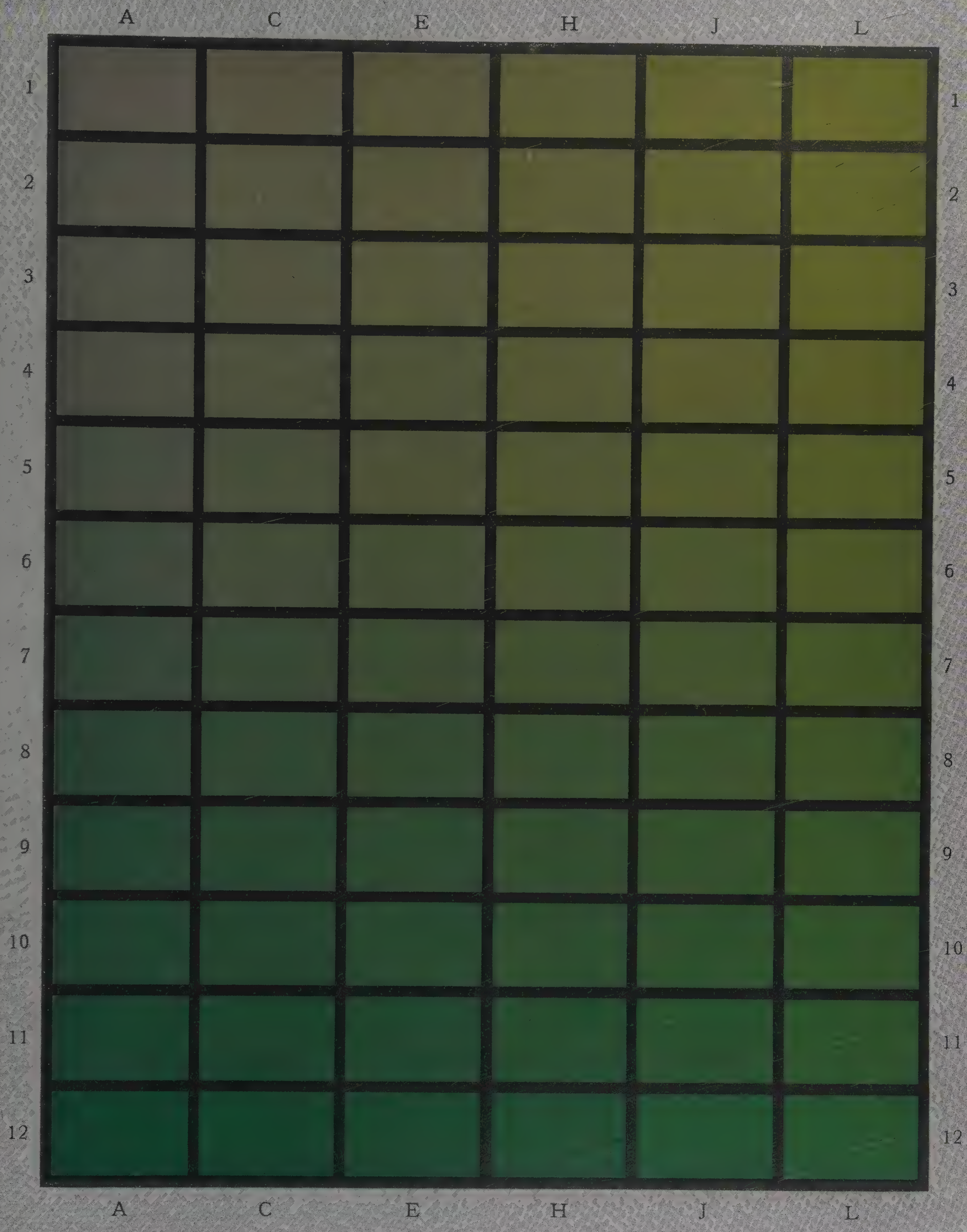
PLATE 23

	A	C	E	H	J	L	
1						Holly Green+	1
2			Andover Green				2
3	Slate-Olive−			Lichen		Hellebore Green	3
4					**LINCOLN GREEN**	Quaker Green	4
5					Elm Green	Cedar Green	5
6						Cypress Green+ Forest Green −	6
7							7
8					Mt. Vernon Green		8
9			Empire Gr.	Meadowgrass	Polo Green		9
10							10
11			Monticello Green		Cossack Green		11
12	Wintergreen English Ivy+	**BRUNSWICK GR., MD**^{P}		**CHROME GR., MD**^{P}			12
	A	C	E	H	J	L	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	A	C	E	H	J	L	
1						Yew Green Brewster Gr++	1
2	Bat Iron Grey −	Privet					2
3							3
4							4
5							5
6							6
7			Fir				7
8							8
9	Swamp						9
10		Shirvan					10
11	Mountain Green Forest+	**HUNTER GREEN** Elephant Green	Tartan Green+				11
12	**BRUNSWICK GR., DEEP^{P}** English Gr.		**EVERGREEN**	**CHROME GR., DEEP^{P}**			12
	A	C	E	H	J	L	

PLATE 24

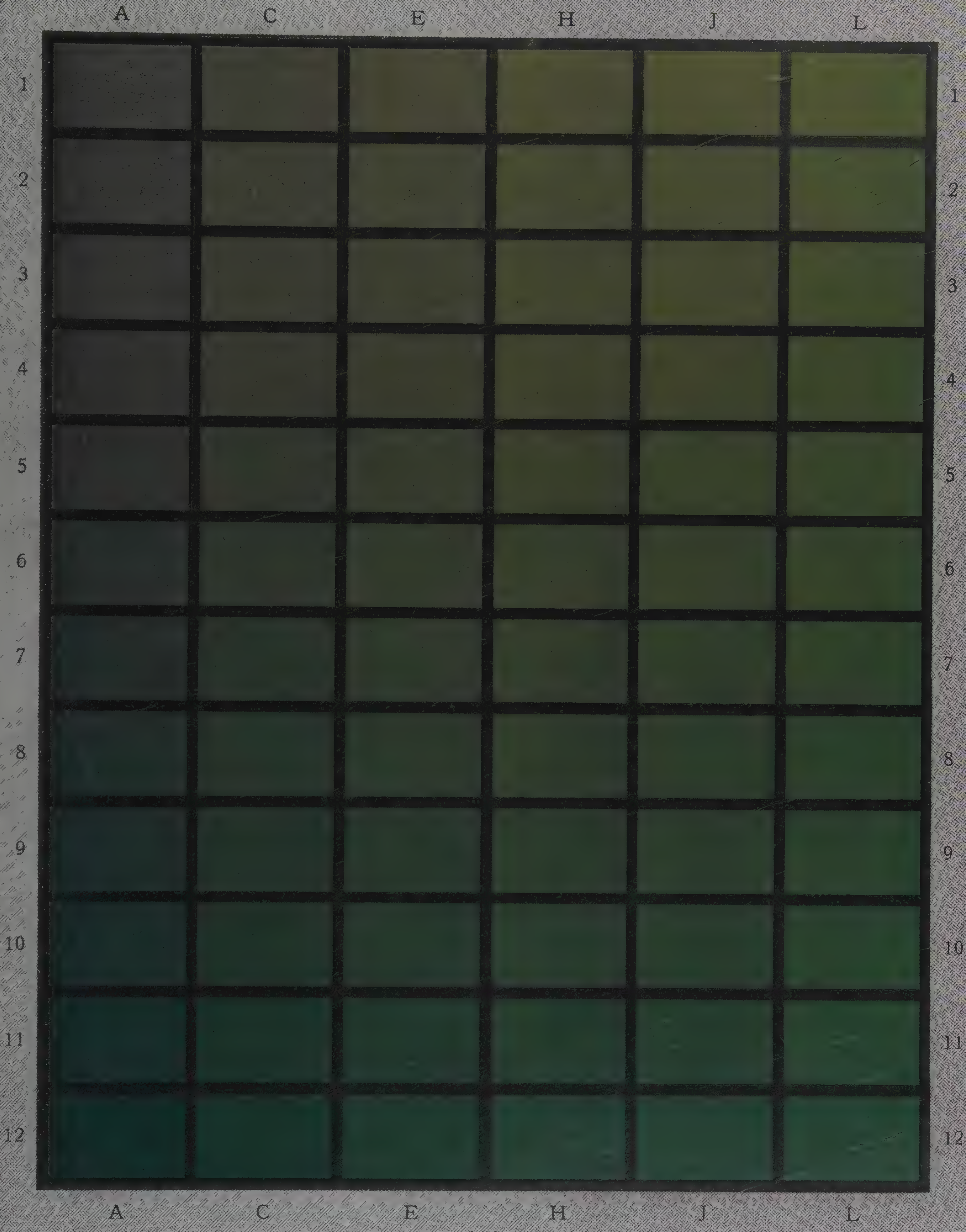
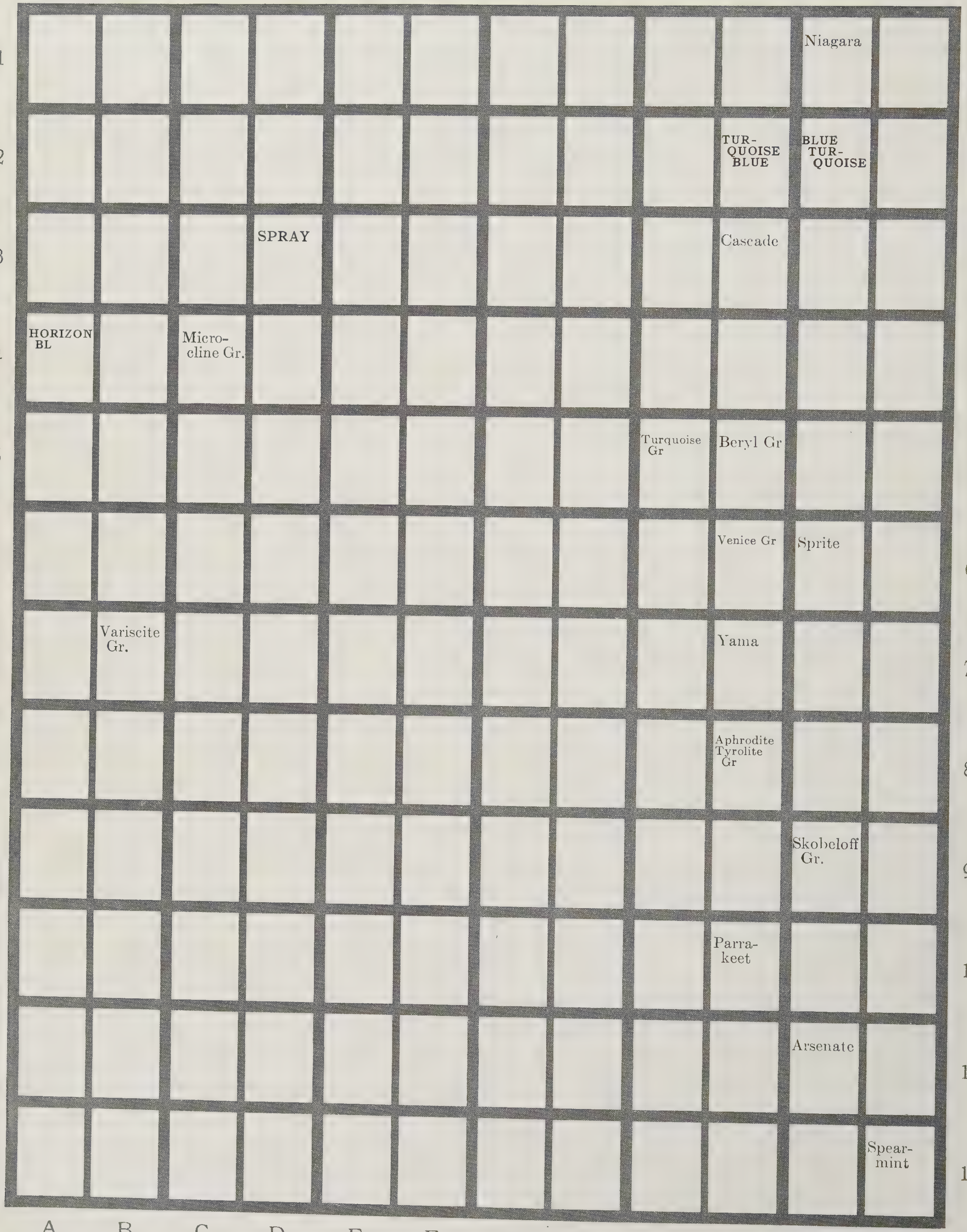


PLATE 25



	A	B	C	D	E	F	G	H	I	J	K	L
1											Niagara	
2										**TURQUOISE BLUE**	**BLUE TURQUOISE**	
3				**SPRAY**						Cascade		
4	**HORIZON BL**		Microcline Gr.									
5									Turquoise Gr	Beryl Gr		
6										Venice Gr	Sprite	
7		Variscite Gr.								Yama		
8										Aphrodite Tyrolite Gr		
9											Skobeloff Gr.	
10										Parrakeet		
11											Arsenate	
12												Spearmint

PLATE 25

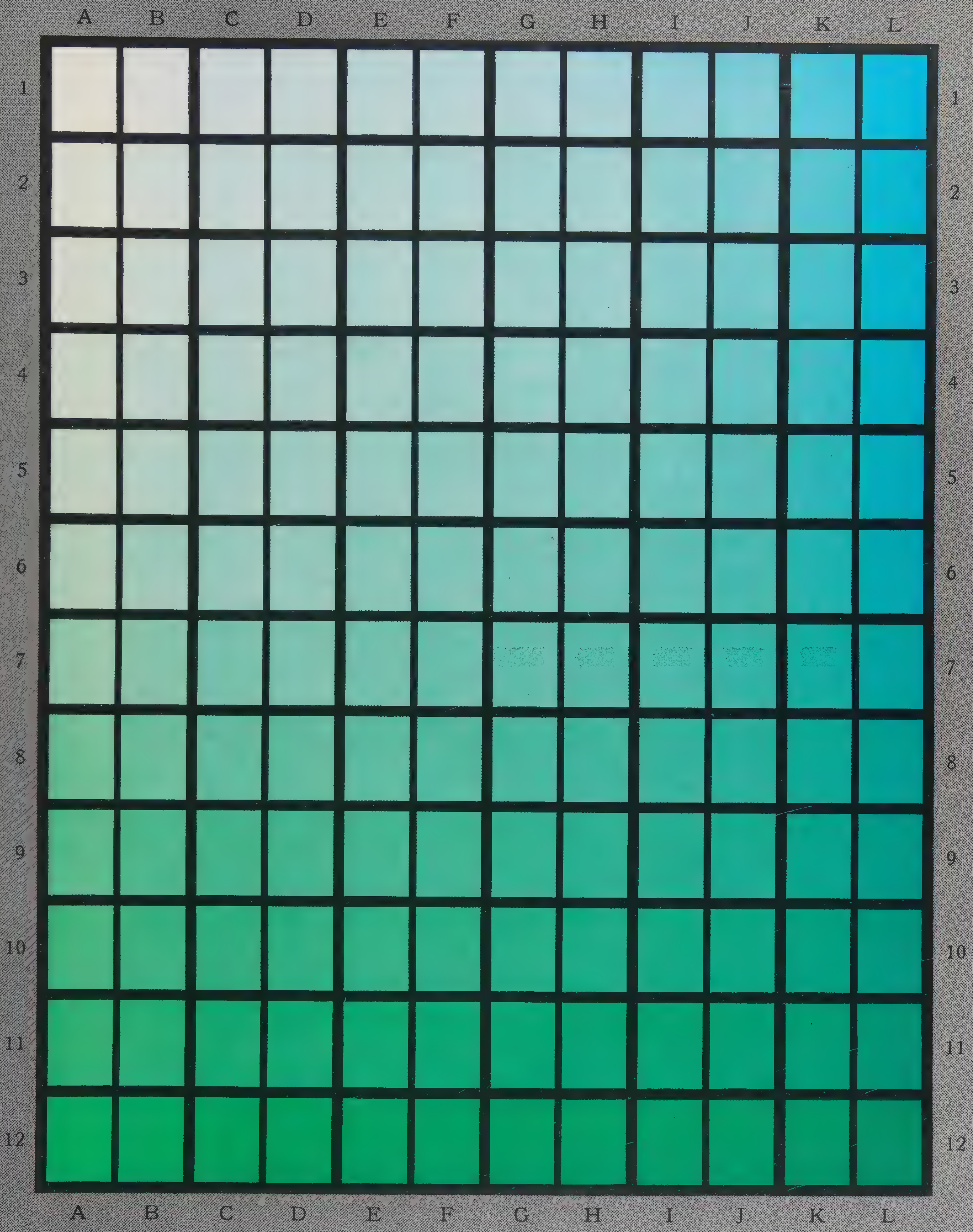

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Plate 26

	A	B	C	D	E	F	G	H	I	J	K	L
1						Etain Bl			Lumiere Bl.			
2								Tourmaline		Nile Bl.	Lagoon	Adriatic
3												
4	Lichen Gr											
5											Lapis	
6												
7						Chantilly						
8										Sulphate Gr.		
9									Serpentine			
10												
11			EMERALD GREEN^{P}									
12												

PLATE 26

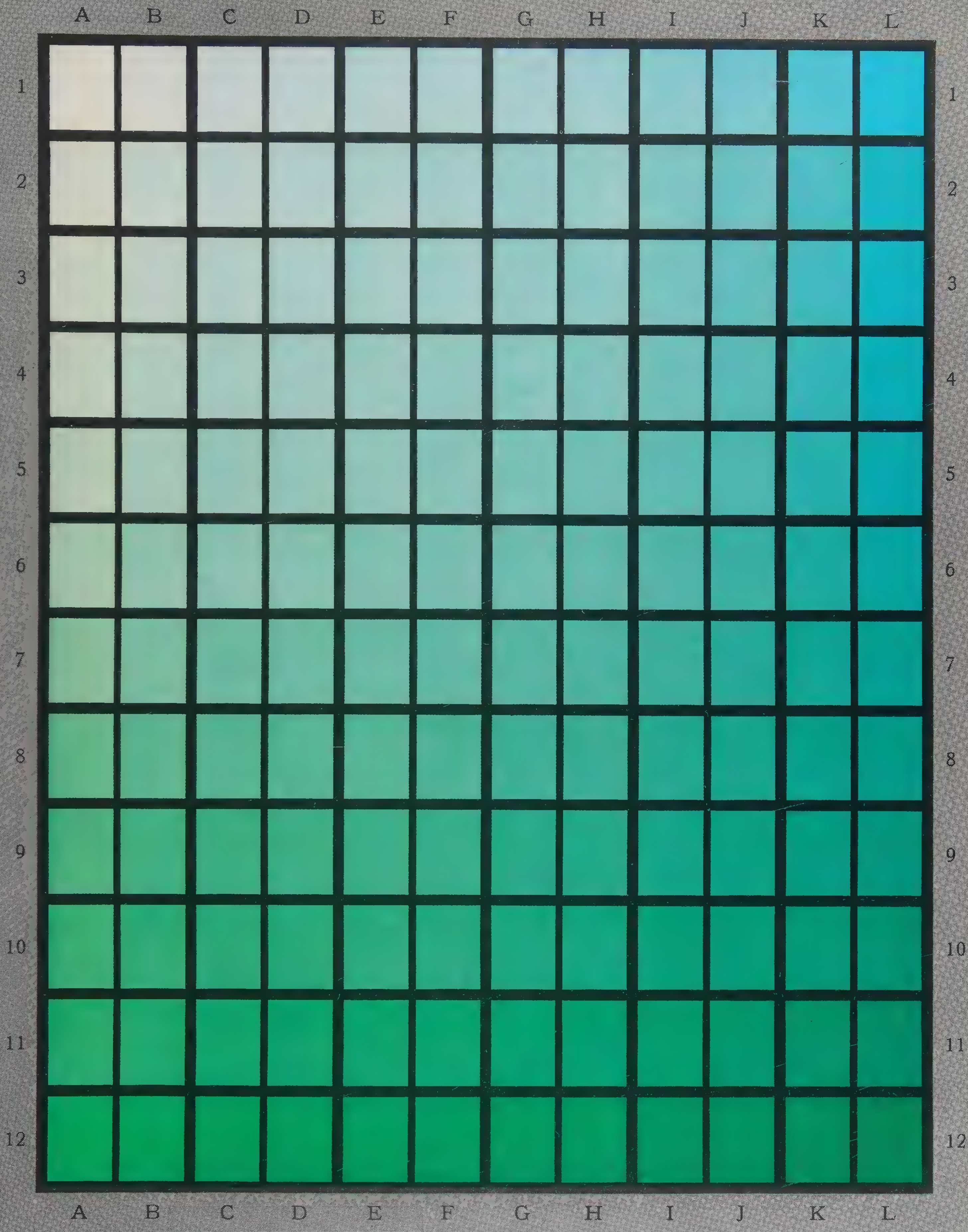
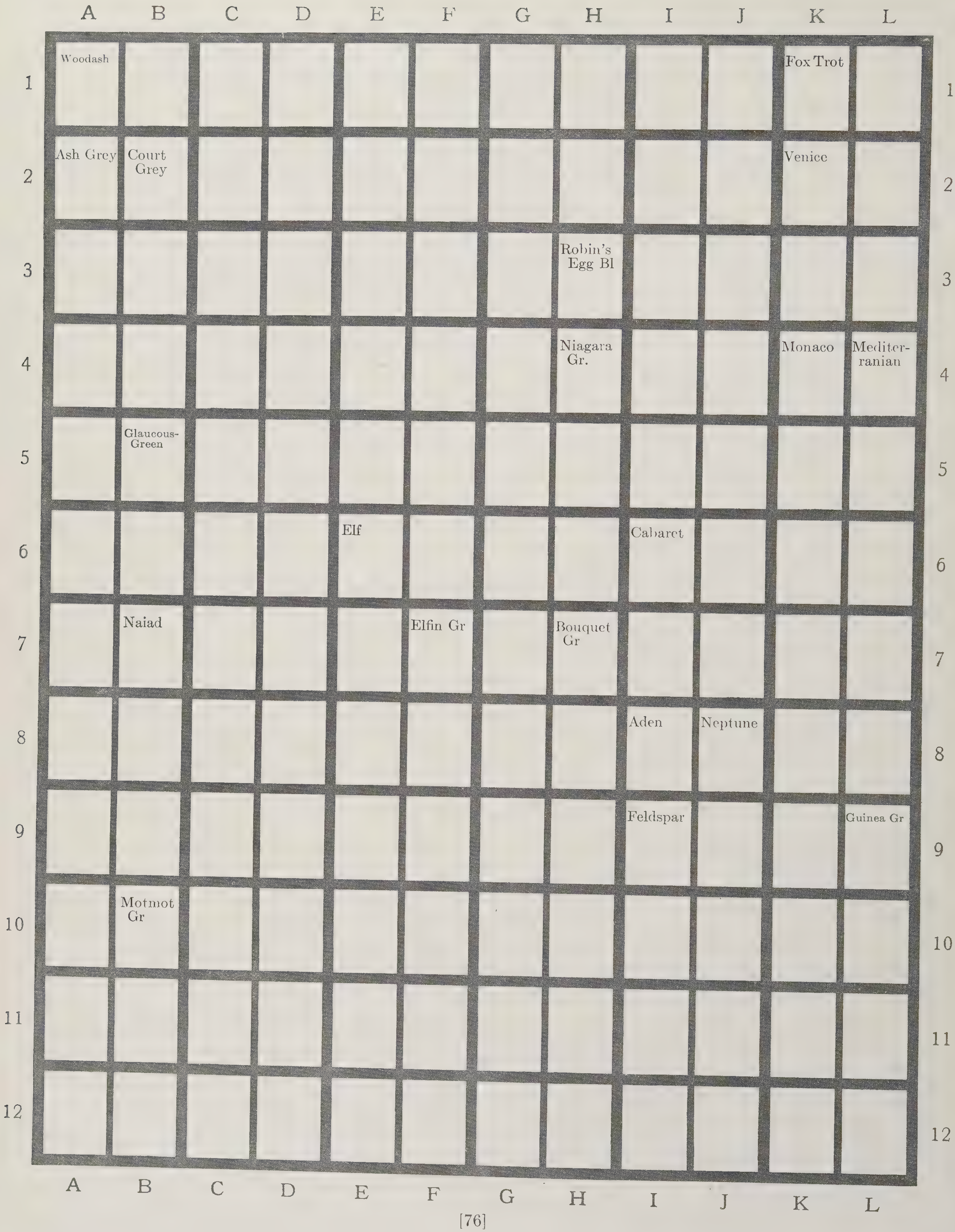


Plate 27



	A	B	C	D	E	F	G	H	I	J	K	L
1	Woodash										Fox Trot	
2	Ash Grey	Court Grey									Venice	
3								Robin's Egg Bl				
4								Niagara Gr.			Monaco	Mediterranian
5		Glaucous-Green										
6					Elf				Cabaret			
7		Naiad				Elfin Gr		Bouquet Gr				
8									Aden	Neptune		
9									Feldspar			Guinea Gr
10		Motmot Gr										
11												
12												

Plate 27

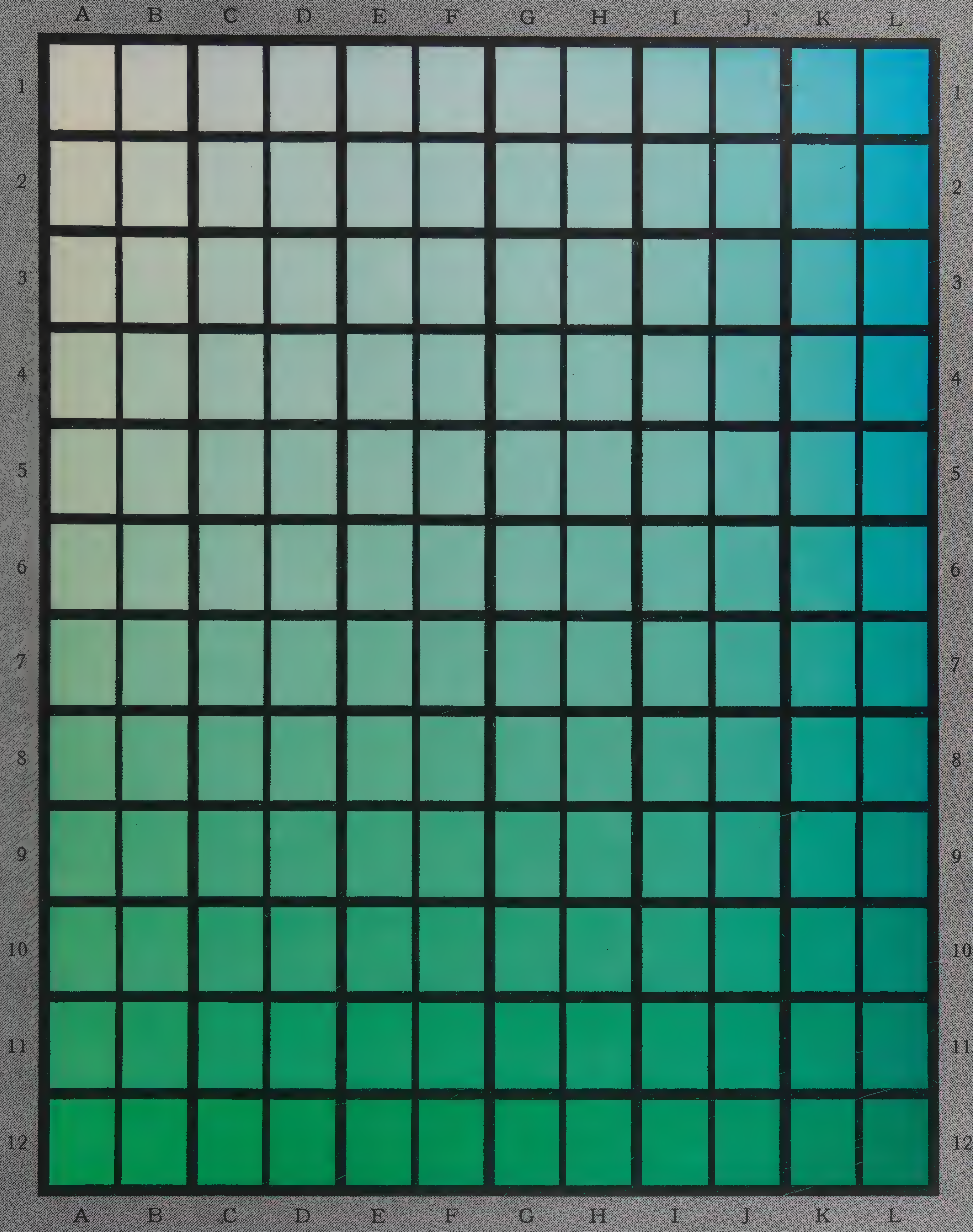

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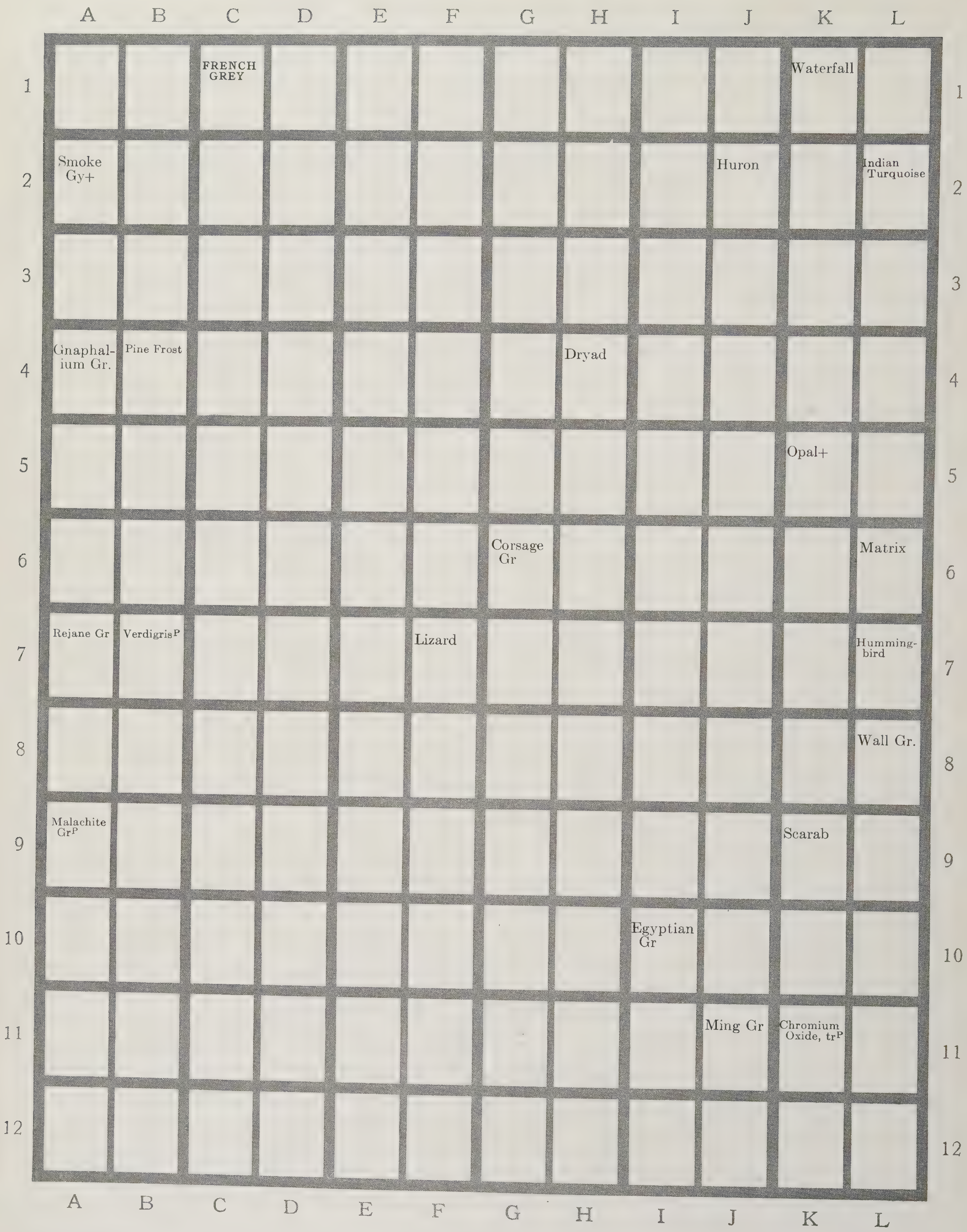
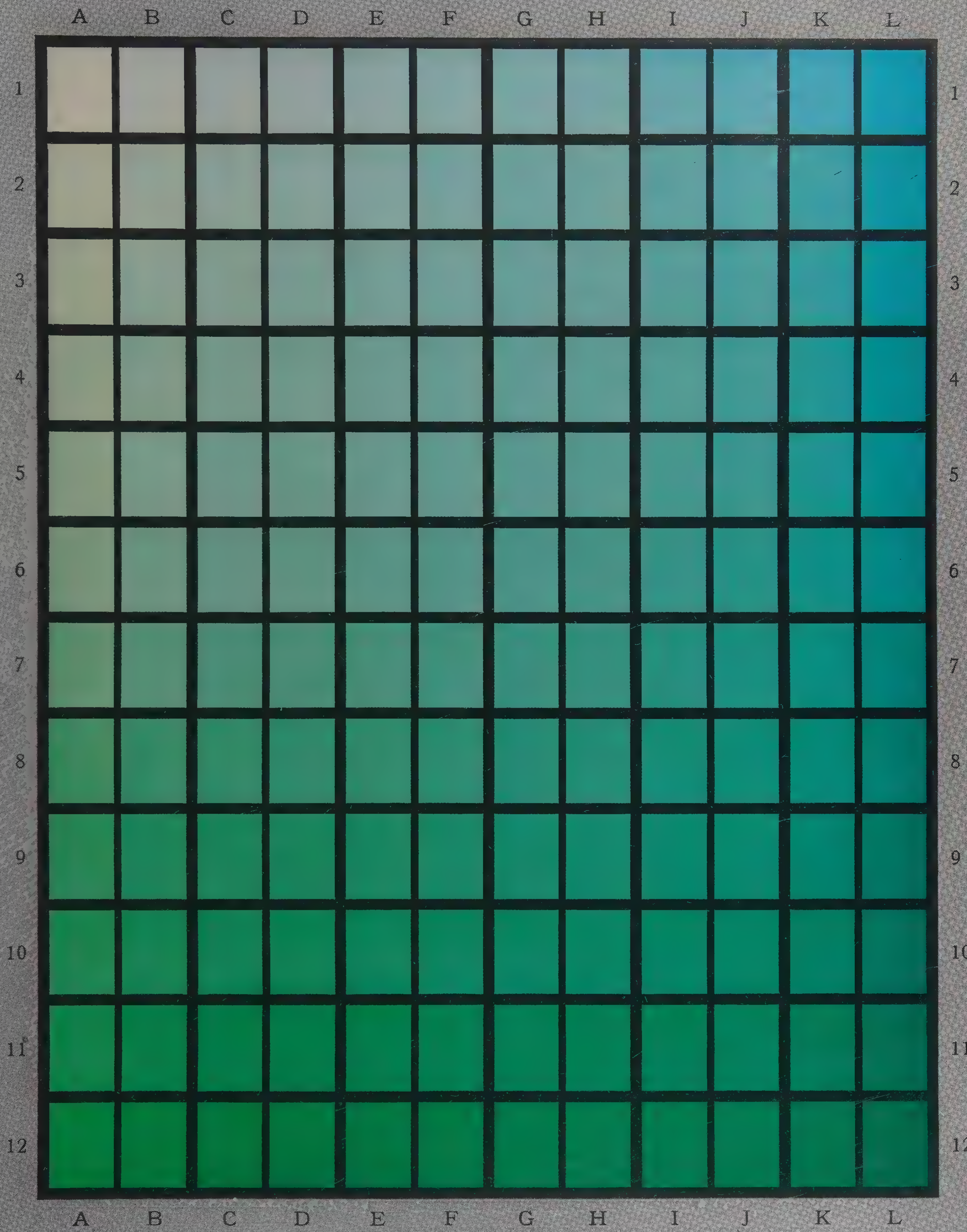
Plate 28



	A	B	C	D	E	F	G	H	I	J	K	L
1			FRENCH GREY								Waterfall	
2	Smoke Gy+									Huron		Indian Turquoise
3												
4	Gnaphalium Gr.	Pine Frost						Dryad				
5											Opal+	
6							Corsage Gr					Matrix
7	Rejane Gr	Verdigris^P				Lizard						Hummingbird
8												Wall Gr.
9	Malachite Gr^P										Scarab	
10									Egyptian Gr			
11										Ming Gr	Chromium Oxide, tr^P	
12												

PLATE 28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	A	B	C	D	E	F	G	H	I	J	K	L	
1													1
2											Ripple Gr		2
3			Dewkiss									Sorrento Gr	3
4		Celandine Gr											4
5				Serpent						Porcelain Gr.			5
6					Posy Gr					Marmora		Kremlin	6
7								Jasper Gr				Paddock	7
8				French Gr	Gretna Gr								8
9											Runnymede		9
10										Amazon	Pi Yu	Mint Chinese Gr. –	10
11												Billiard	11
12				Ski		Erin					Yu Chi		12
	A	B	C	D	E	F	G	H	I	J	K	L	

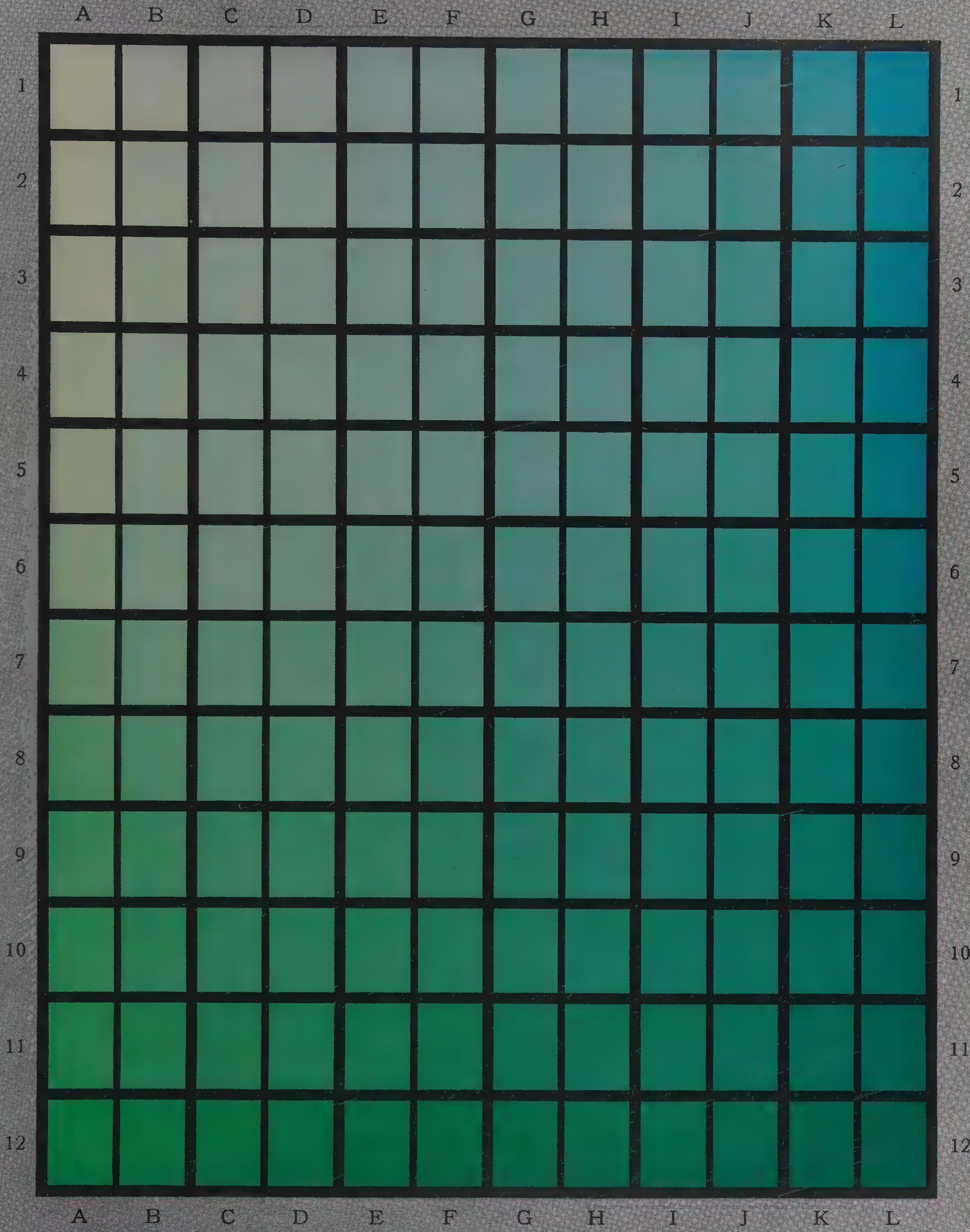
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PLATE 30

	A	B	C	D	E	F	G	H	I	J	K	L
1							Cabbage Gr					
2			Storm Grey			Artemisia Gr.						Michigan
3												Superior+
4												
5					Silverpine							
6					**ALMOND GR**							Canton Jade Samara+
7				Russian Gr.				**BLUE SPRUCE**+				Amulet
8					Kashmir							
9								Gobelin Gr				
10				Meadow Gr								
11										Tiber	Amarna	
12											Service Corps	

PLATE 30

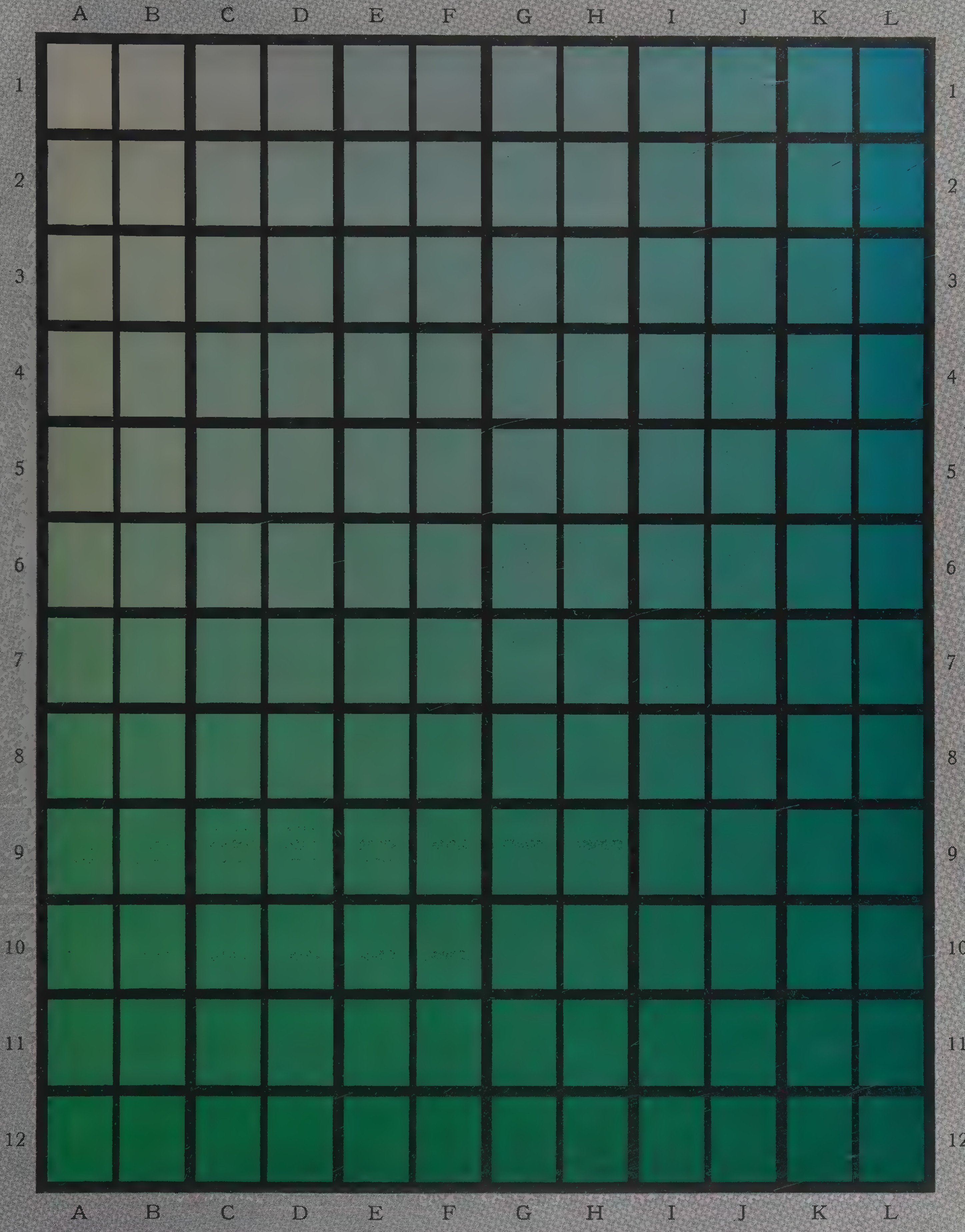

Plate 31

	A	C	E	H	J	L	
1						**MYRTLE GREEN**— Baltic	1
2	Stone Grey	Castor Grey				Invisible Gr.	2
3					Pan	Bayou	3
4				Juniper			4
5				Pinegrove Kabistan		Banshee Narva—	5
6		Aspen Green	Pitchpine Thyme+	Gardenia Green		Pine Tree Duck Green Blue Grass— Vagabond Green+	6
7			Nickle Green Frosty Green+	Persian Green Sea Moss (b)+	**BOTTLE GREEN** Meadowbrook	Bosphorus	7
8		Poplar	Antique Green			Alhambra	8
9		Alpine Green		Pineneedle			9
10	Danube Green			Marine Green—		Robinhood Green	10
11					Carrara Green	Triton	11
12				Bakst Green			12
	A	C	E	H	J	L	

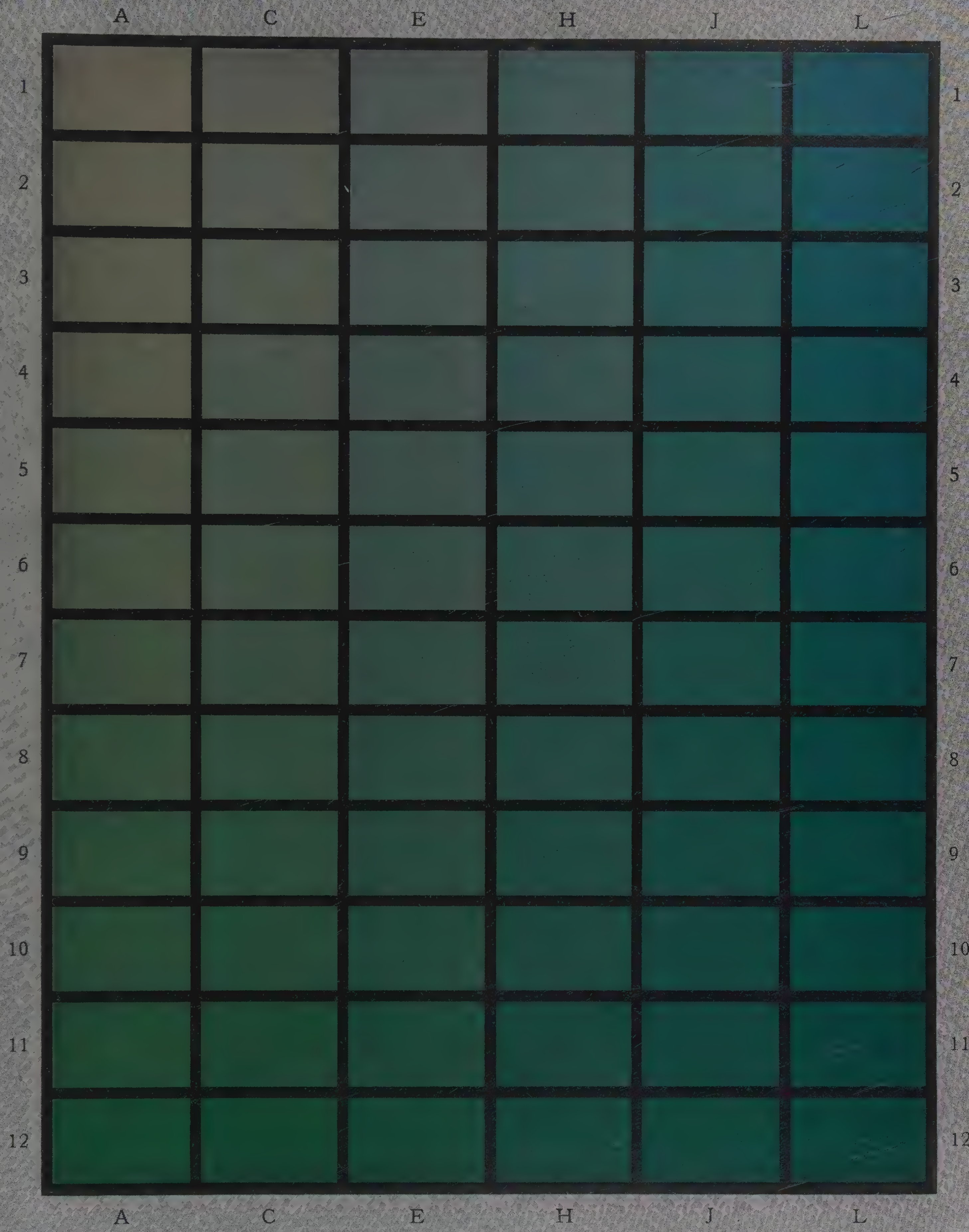
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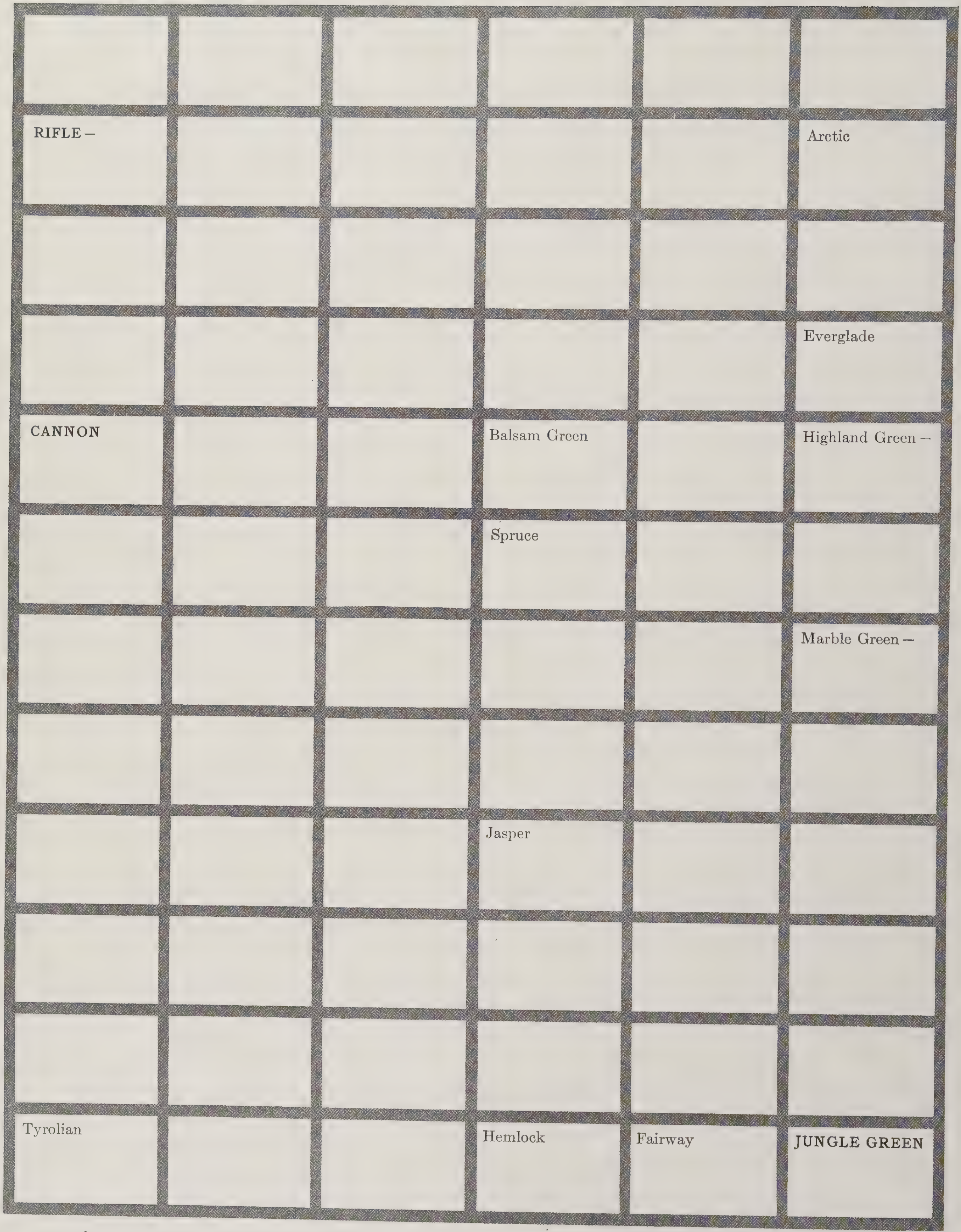
PLATE 32



	A	C	E	H	J	L
1						
2	**RIFLE –**					Arctic
3						
4						Everglade
5	**CANNON**			Balsam Green		Highland Green –
6				Spruce		
7						Marble Green –
8						
9				Jasper		
10						
11						
12	Tyrolian			Hemlock	Fairway	**JUNGLE GREEN**

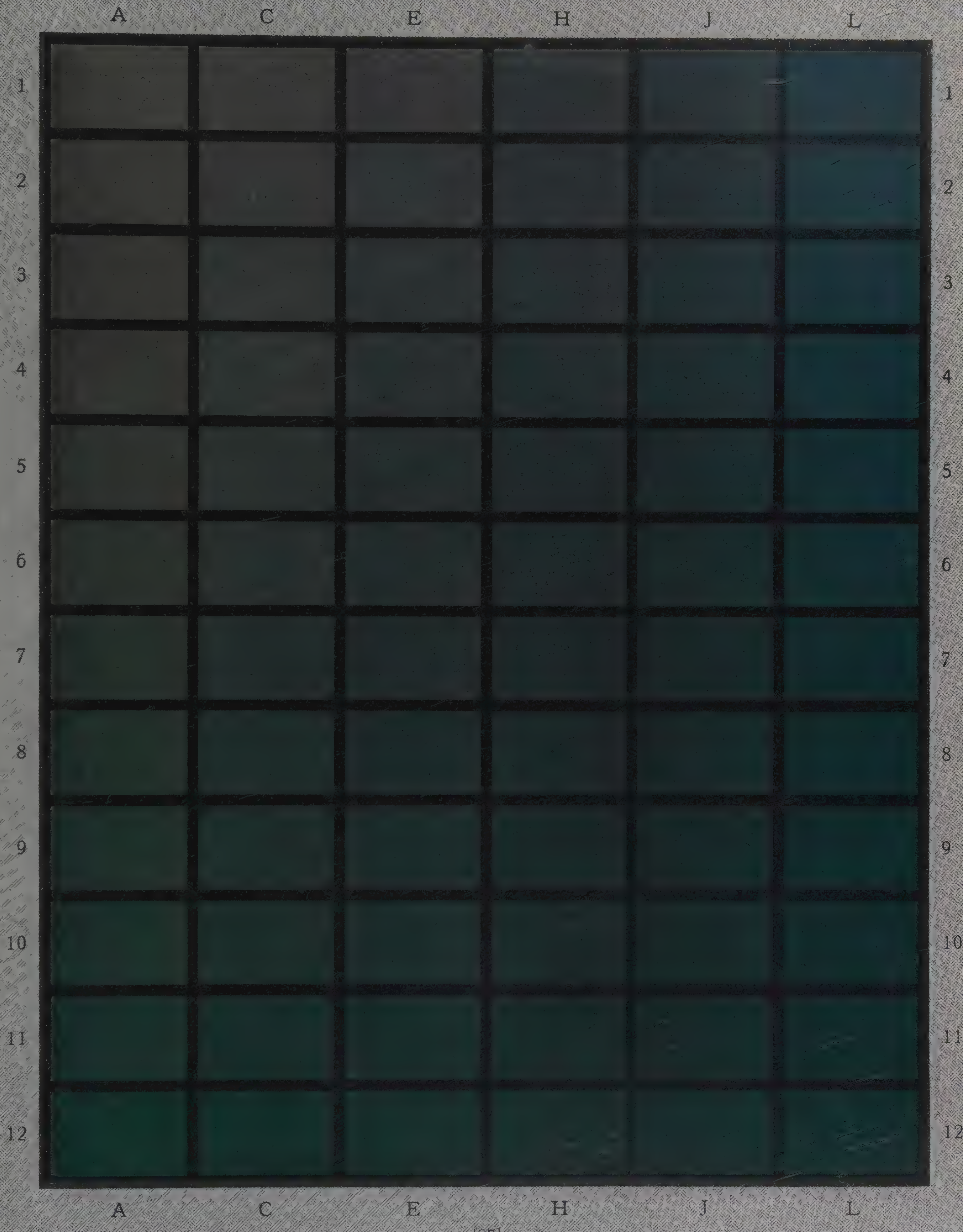

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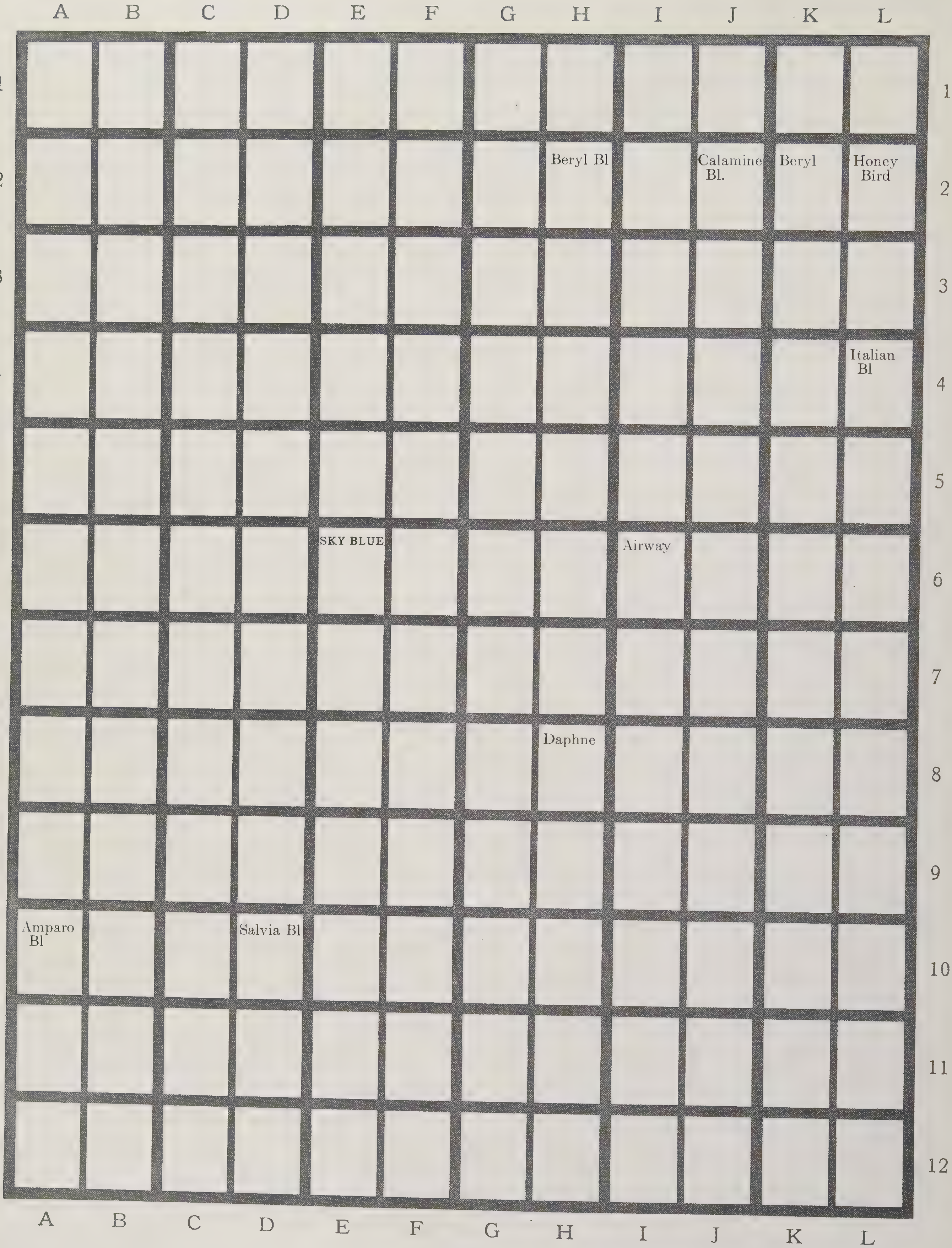
Plate 33



	A	B	C	D	E	F	G	H	I	J	K	L	
1													1
2								Beryl Bl		Calamine Bl.	Beryl	Honey Bird	2
3													3
4												Italian Bl	4
5													5
6					SKY BLUE				Airway				6
7													7
8								Daphne					8
9													9
10	Amparo Bl			Salvia Bl									10
11													11
12													12
	A	B	C	D	E	F	G	H	I	J	K	L	

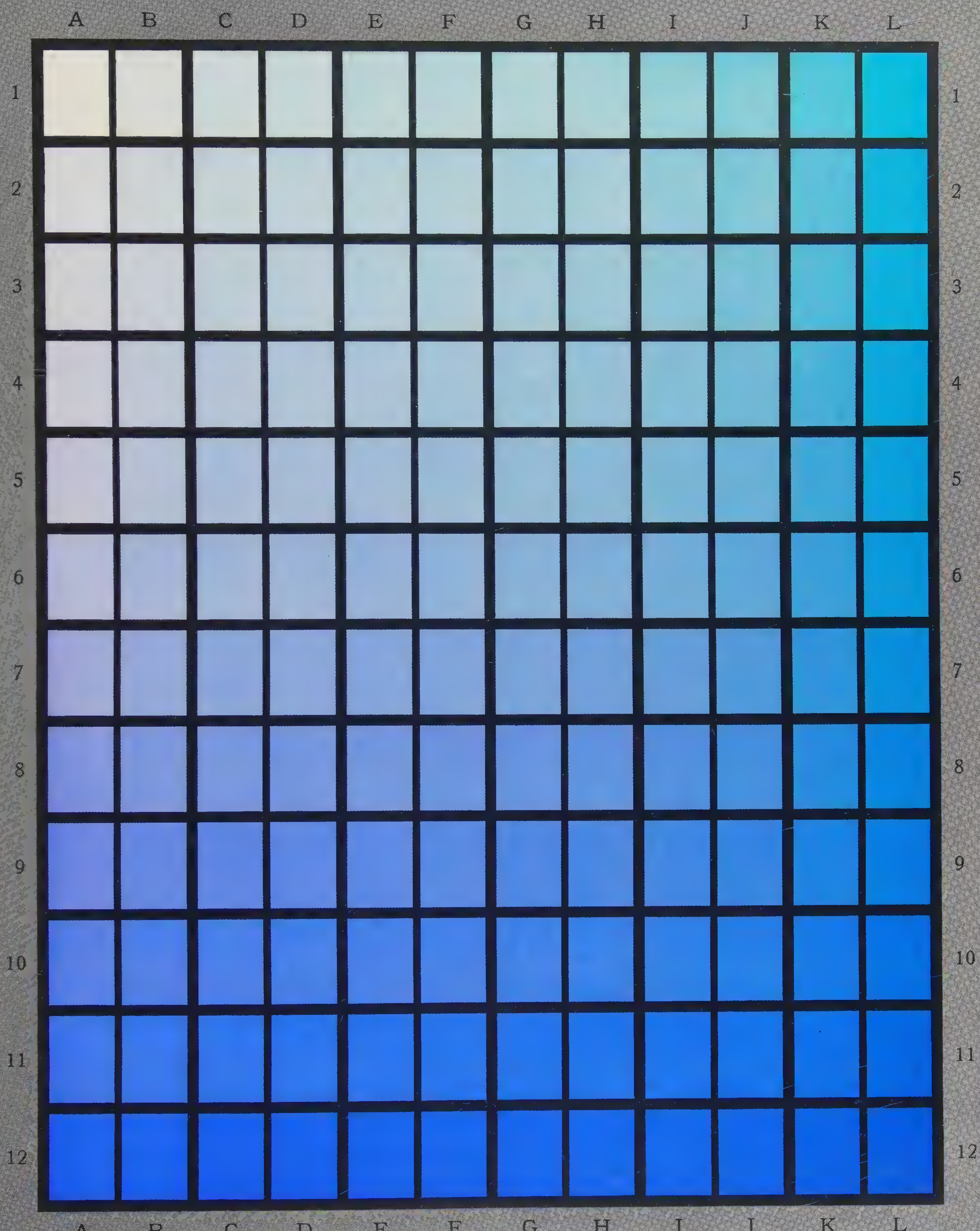

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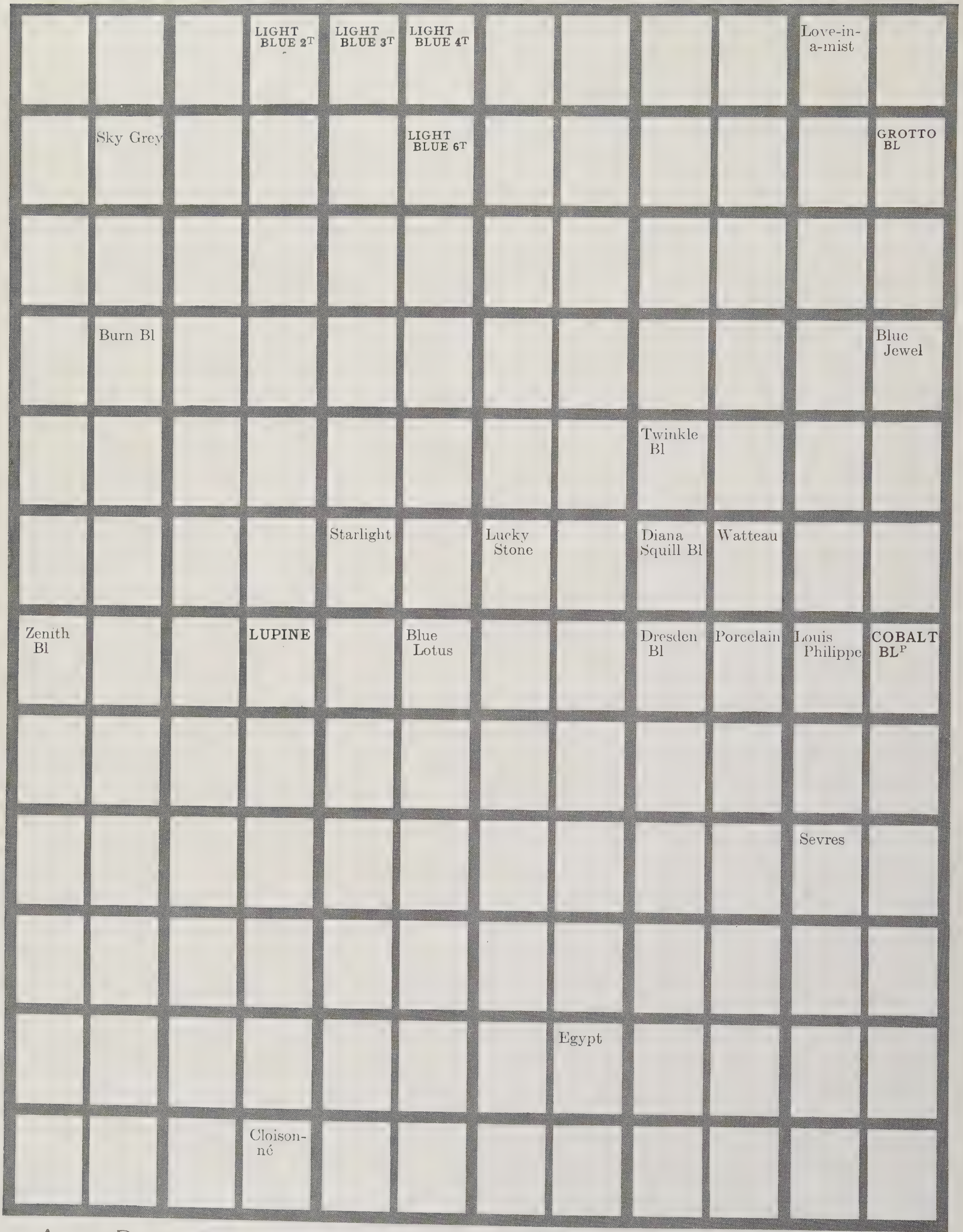
PLATE 34



	A	B	C	D	E	F	G	H	I	J	K	L	
1				**LIGHT BLUE 2^{T}**	**LIGHT BLUE 3^{T}**	**LIGHT BLUE 4^{T}**					Love-in-a-mist		1
2		Sky Grey				**LIGHT BLUE 6^{T}**						**GROTTO BL**	2
3													3
4		Burn Bl										Blue Jewel	4
5									Twinkle Bl				5
6					Starlight		Lucky Stone		Diana Squill Bl	Watteau			6
7	Zenith Bl			**LUPINE**		Blue Lotus			Dresden Bl	Porcelain	Louis Philippe	**COBALT BL^{P}**	7
8													8
9											Sevres		9
10													10
11								Egypt					11
12				Cloisonné									12
	A	B	C	D	E	F	G	H	I	J	K	L	

Plate 34

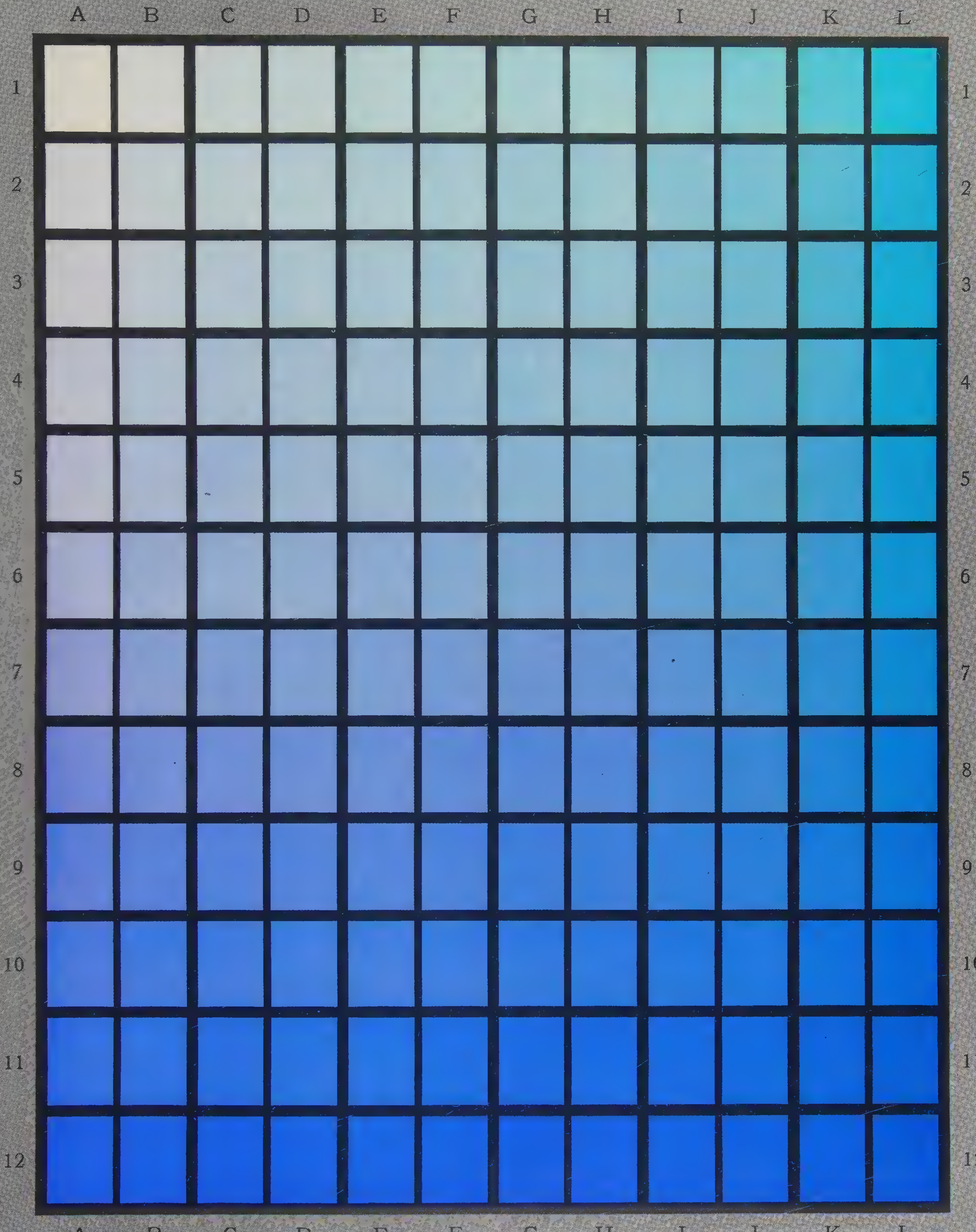
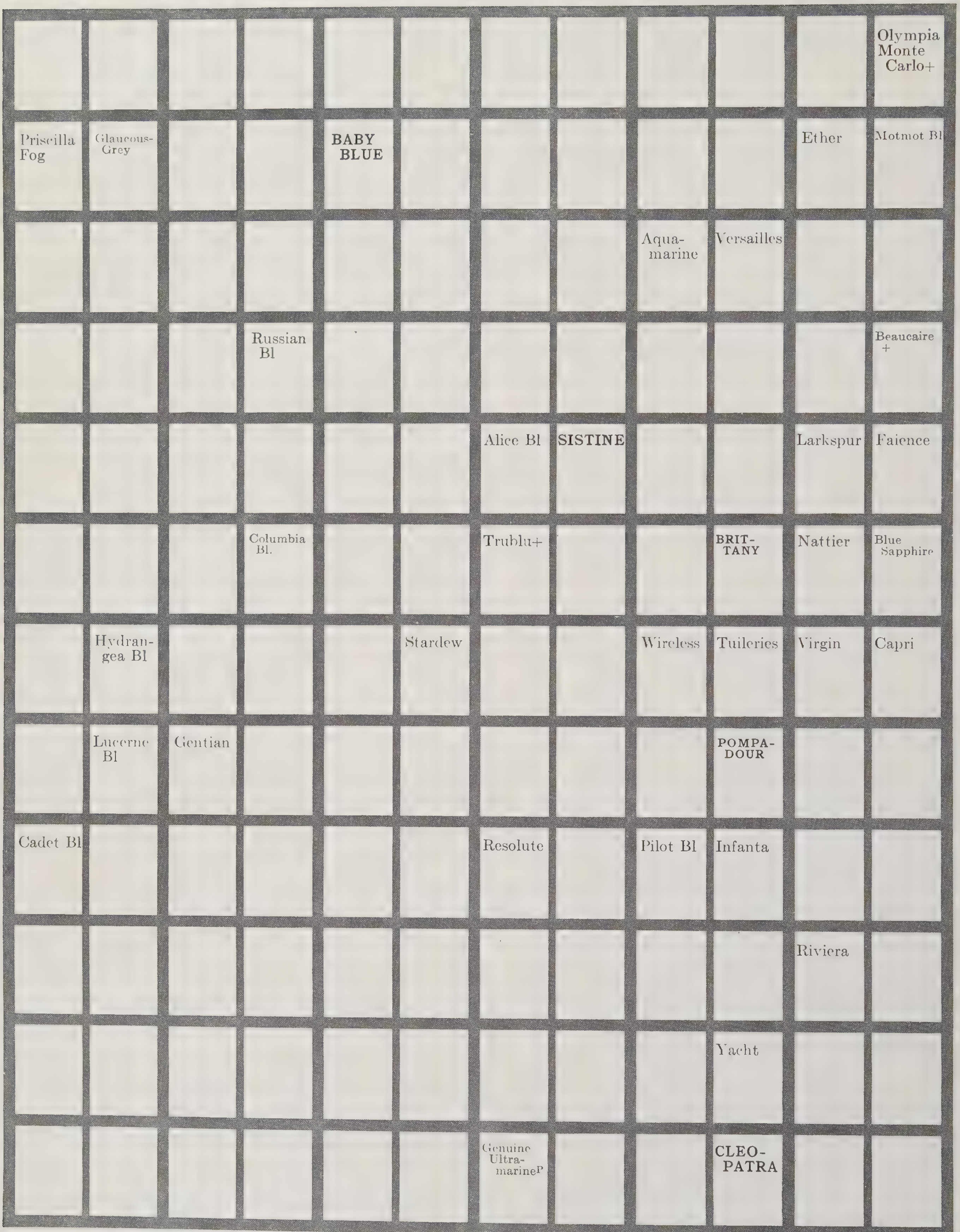


PLATE 35



	A	B	C	D	E	F	G	H	I	J	K	L
1												Olympia Monte Carlo+
2	Priscilla Fog	Glaucous-Grey			**BABY BLUE**						Ether	Motmot Bl
3									Aquamarine	Versailles		
4				Russian Bl								Beaucaire +
5							Alice Bl	**SISTINE**			Larkspur	Faience
6				Columbia Bl.			Trublu+			**BRITTANY**	Nattier	Blue Sapphire
7		Hydrangea Bl				Stardew			Wireless	Tuileries	Virgin	Capri
8		Lucerne Bl	Gentian							**POMPADOUR**		
9	Cadet Bl						Resolute		Pilot Bl	Infanta		
10											Riviera	
11										Yacht		
12							Genuine Ultramarine^{P}			**CLEOPATRA**		

Plate 35

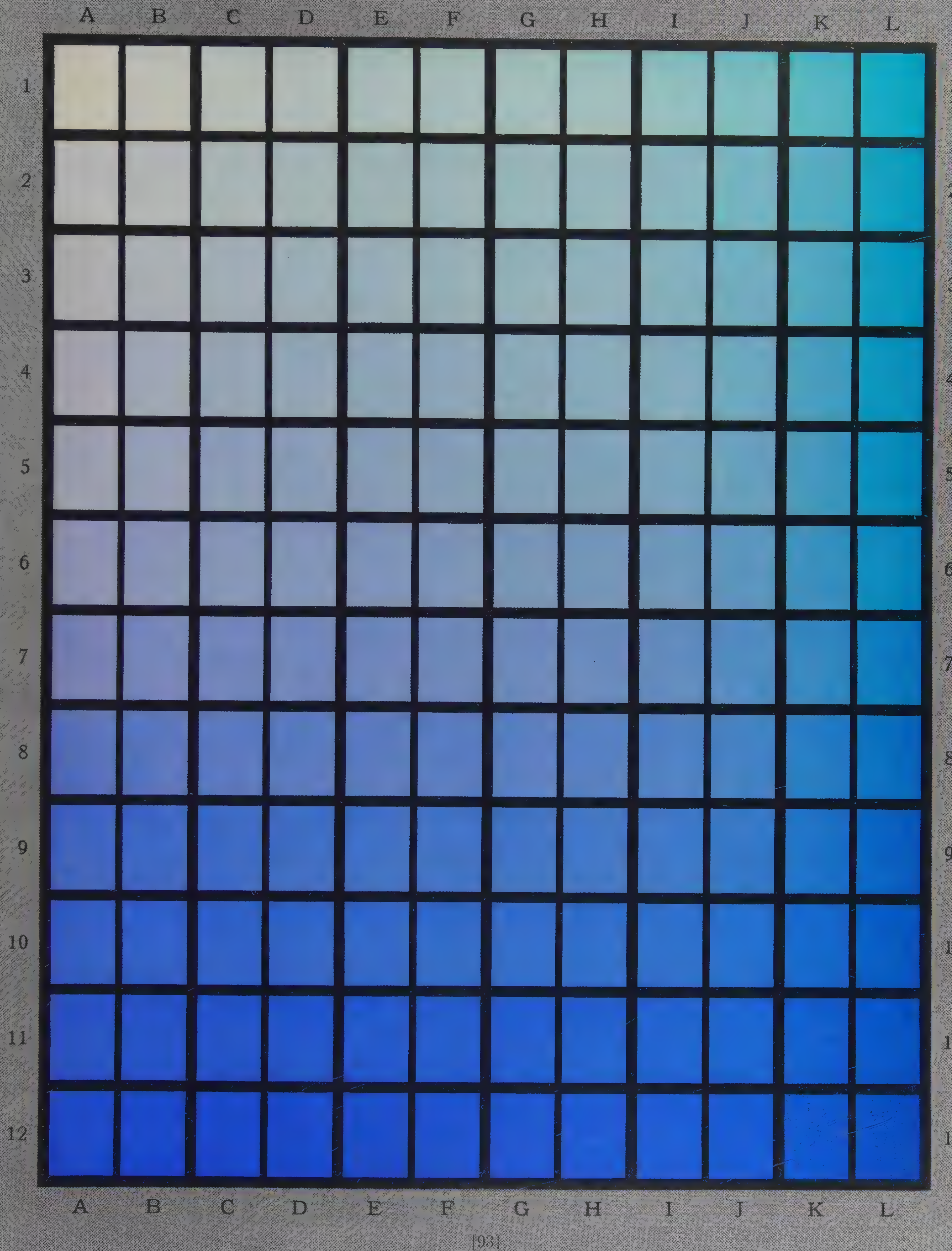


PLATE 36

	A	B	C	D	E	F	G	H	I	J	K	L
1						Mésange				Pacific		
2	**NICKLE** Nimbus+	Puritan Grey					Bambino	Powder Bl Poudre		Cyan Bl+	Email+	Rapids
3	Gull Gy					Bleu Passé			Glaucous Blue	Porcelain Blue		
4			Cadet Grey				Forget-me-not Bl	Iceberg	Infantry Moonlight Bl			Kashan
5			Crayon Bl				Cloud					
6			Parula Bl	Arctic Bl		Delphinium	Twilight	Aero	**SAXE BL**	Tile Bl	Venezia	Dragonfly
7					Milano Bl+	Flax-flower Bl	Orient Bl		**QUIMPER**	Nikko China Bl	Ceramic	Duck Bl
8		**QUEEN BL**					Jay Blue		Chin-Chin Bl	**EMPIRE BL**	Murillo	
9										**BLUE BIRD**	Limoges	
10												
11				Orient					Victoria Bl.			
12						**CH'ING**						

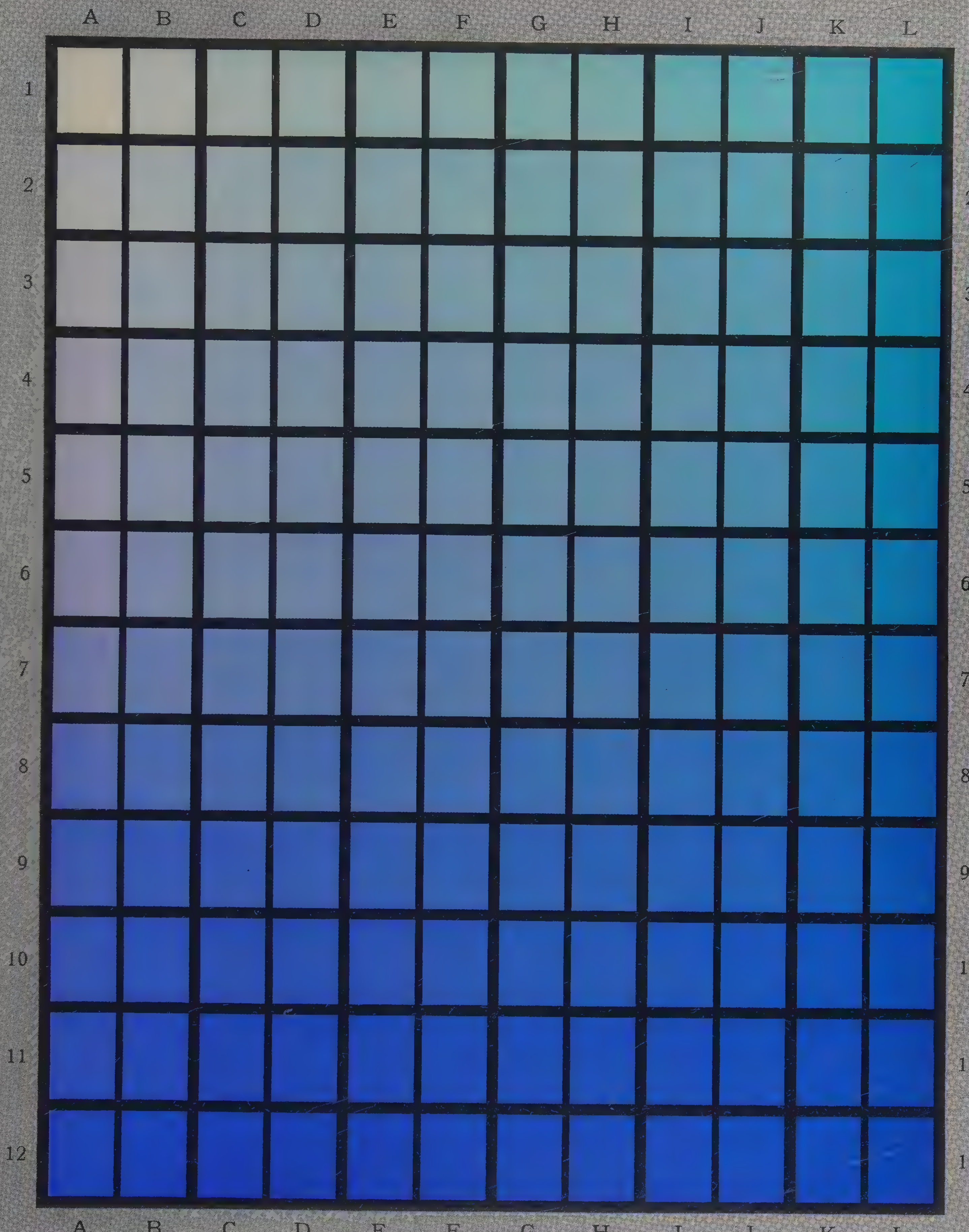

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PLATE 37

	A	B	C	D	E	F	G	H	I	J	K	L	
1			Hathi Grey								Riga		1
2	**NEW SILVER** Dawn Gy							Immenssee		Lake Blue	Gendarme Bl	Jouvence Bl.	2
3	Chinchilla				Medici Bl.								3
4											Como		4
5			Poilu			Serapi			Gobelin Bl.			Drake Merle++	5
6										Arno Bl	Genoa Bl	**PEACOCK BL**	6
7	**LIGHT WEDGWOOD**		**OLD CHINA**		**COPENHAGEN**				**ELECTRIC BL**		Napoli	Skating Newport Whirlpool+	7
8			Tyrian Bl			Comet		Hydro	**PEASANT BL**			**SAPPHIRE**	8
9										Madonna			9
10	Mosaic Bl									Bluebell	Raphael		10
11								Triumph Bl					11
12			Imperial Bl		Cairo								12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 37

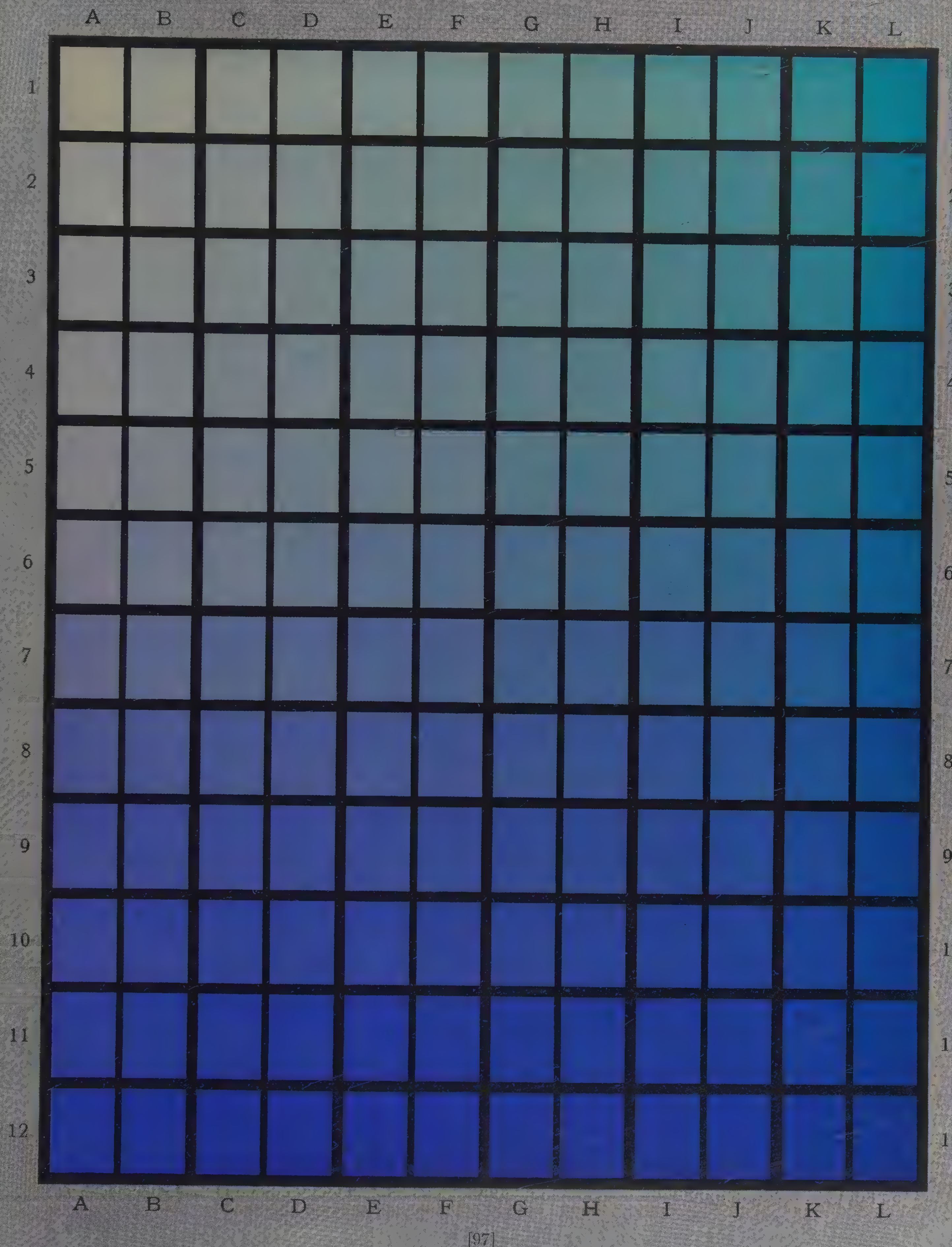
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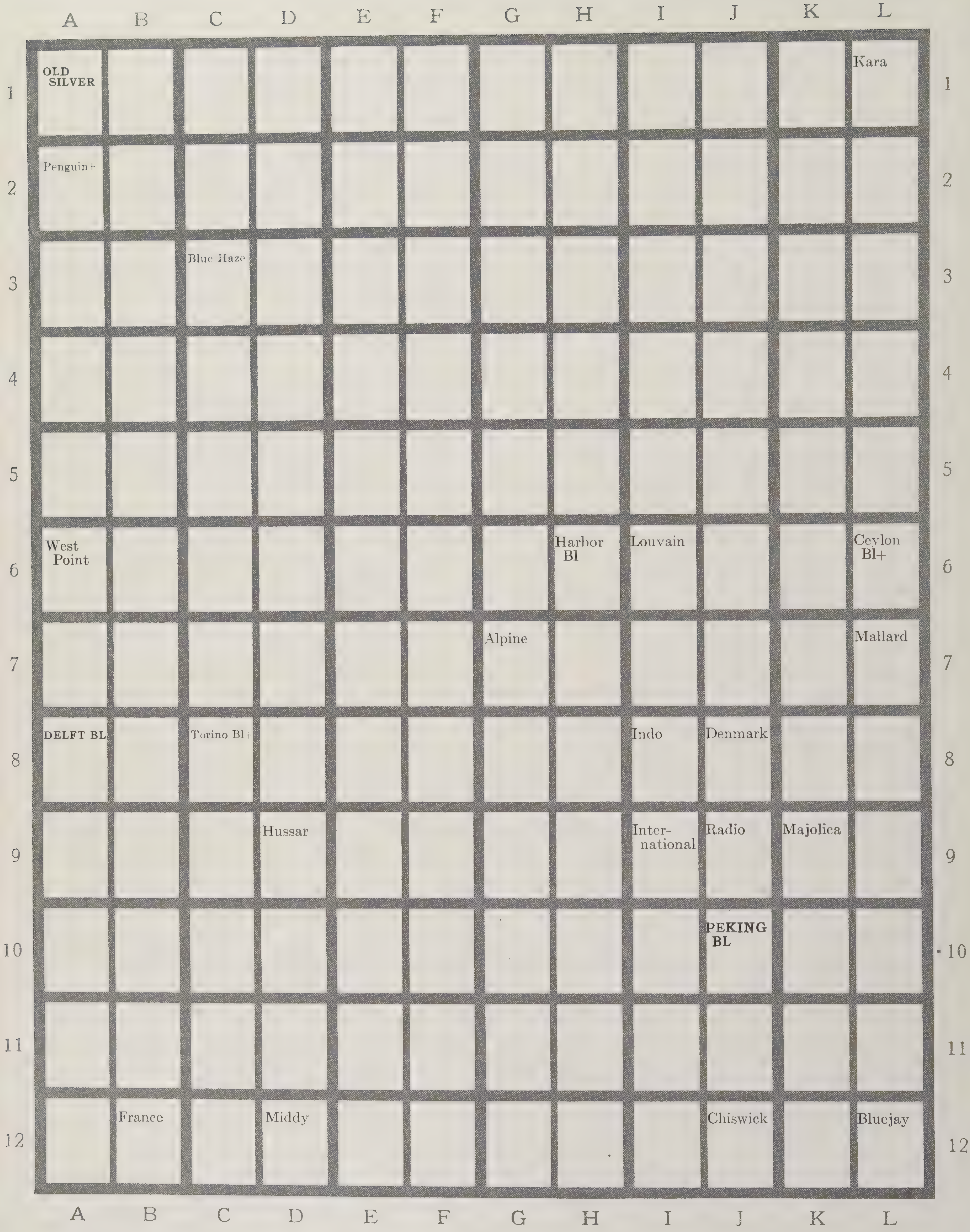
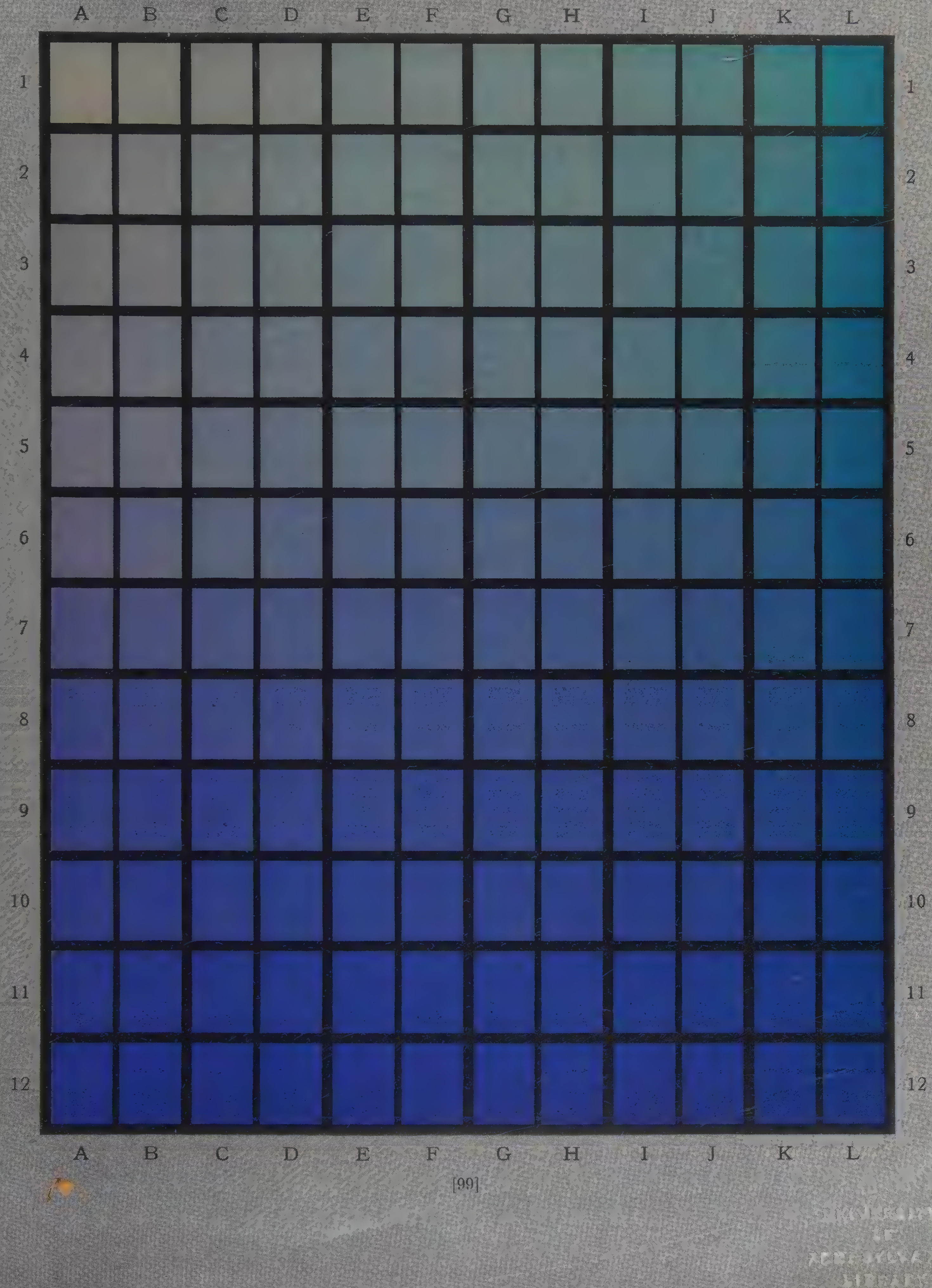
PLATE 38



	A	B	C	D	E	F	G	H	I	J	K	L
1	**OLD SILVER**											Kara
2	Penguin+											
3			Blue Haze									
4												
5												
6	West Point							Harbor Bl	Louvain			Ceylon Bl+
7							Alpine					Mallard
8	**DELFT BL**		Torino Bl+						Indo	Denmark		
9				Hussar					International	Radio	Majolica	
10										**PEKING BL**		
11												
12		France		Middy						Chiswick		Bluejay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UNIVERSITY
OF
PENNSYLVANIA
LIBRARY

PLATE 39

	A	C	E	H	J	L	
1						Maris	1
2	Jack Rabbit				Rigi Blue		2
3	Dover Grey						3
4	Rail						4
5						Olympic	5
6					Arona	Duckling Teal Blue+	6
7	**SLATE**			Glacier Blue–	Bruges	Teal Duck	7
8					Glacier	Pagoda Atlantis+	8
9							9
10			**FLEMISH BLUE**		Dozar	Kingfisher	10
11	Marine Corps	Blue Devil+	Canton Blue Orion Holland Blue–	Tapestry Majolica Blue Peasant Blue–			11
12		Colonial	**JAPAN BLUE**				12
	A	C	E	H	J	L	

PLATE 39

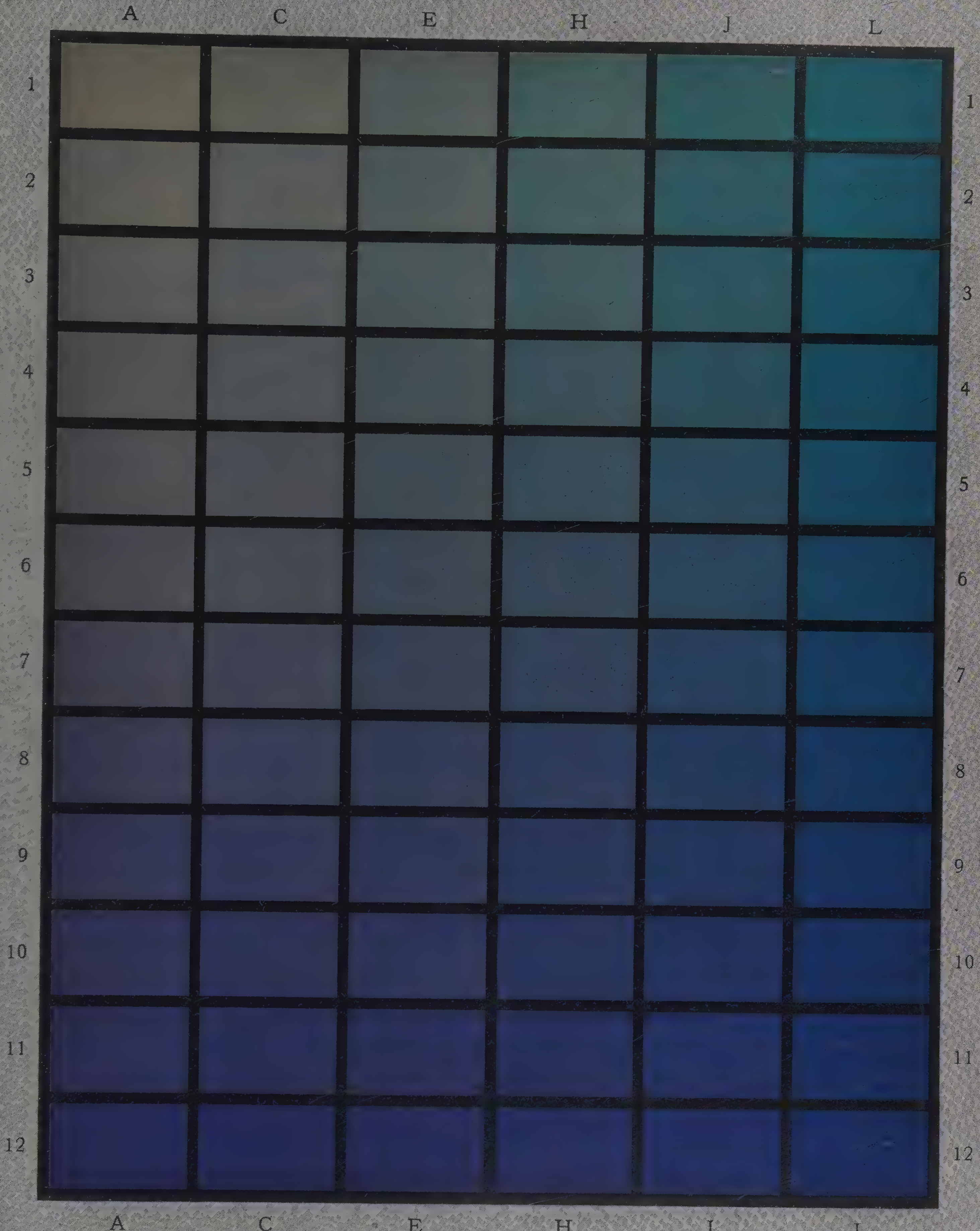
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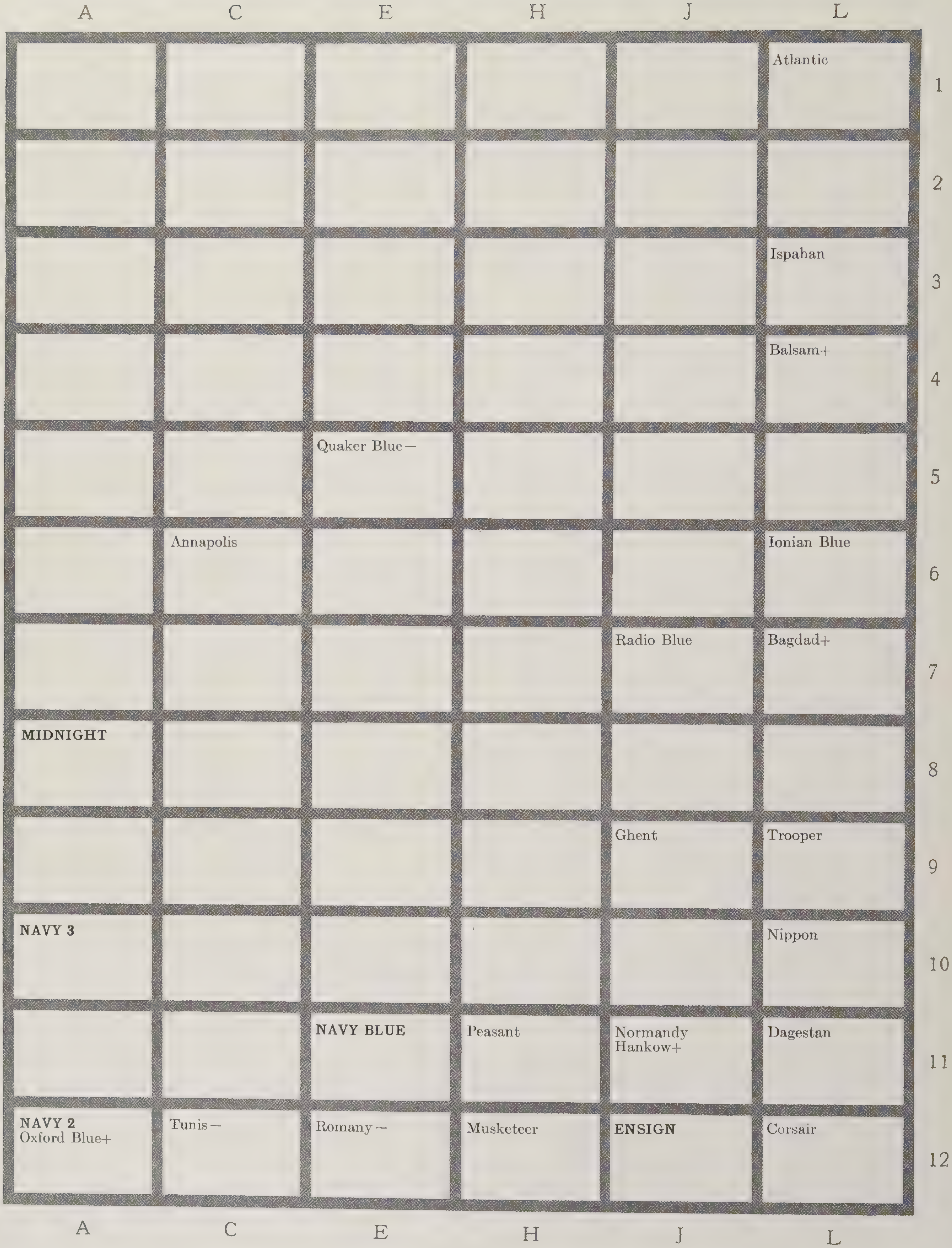
PLATE 40



	A	C	E	H	J	L
1						Atlantic
2						
3						Ispahan
4						Balsam+
5			Quaker Blue–			
6		Annapolis				Ionian Blue
7					Radio Blue	Bagdad+
8	**MIDNIGHT**					
9					Ghent	Trooper
10	**NAVY 3**					Nippon
11			**NAVY BLUE**	Peasant	Normandy Hankow+	Dagestan
12	**NAVY 2** Oxford Blue+	Tunis–	Romany–	Musketeer	**ENSIGN**	Corsair

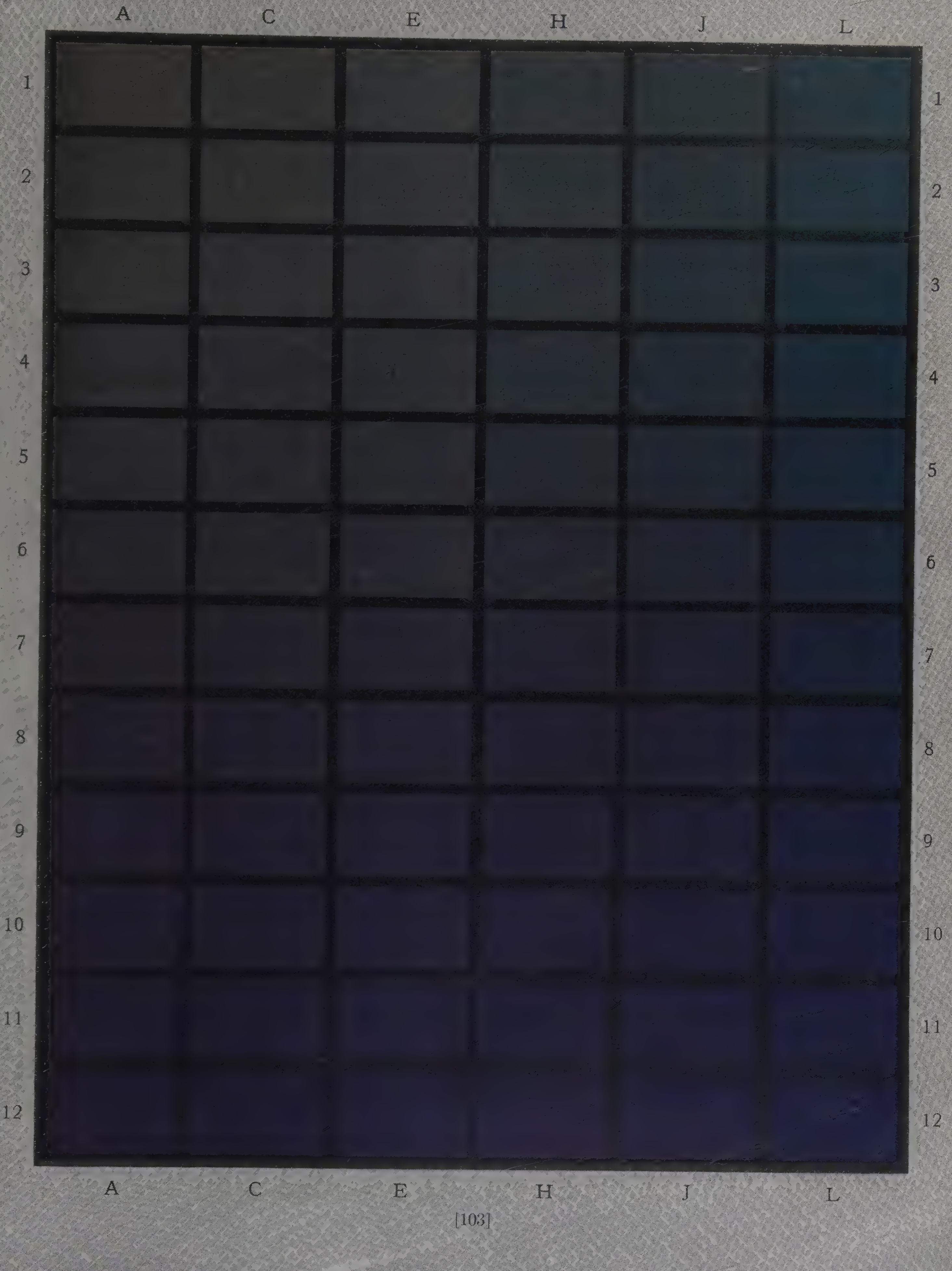

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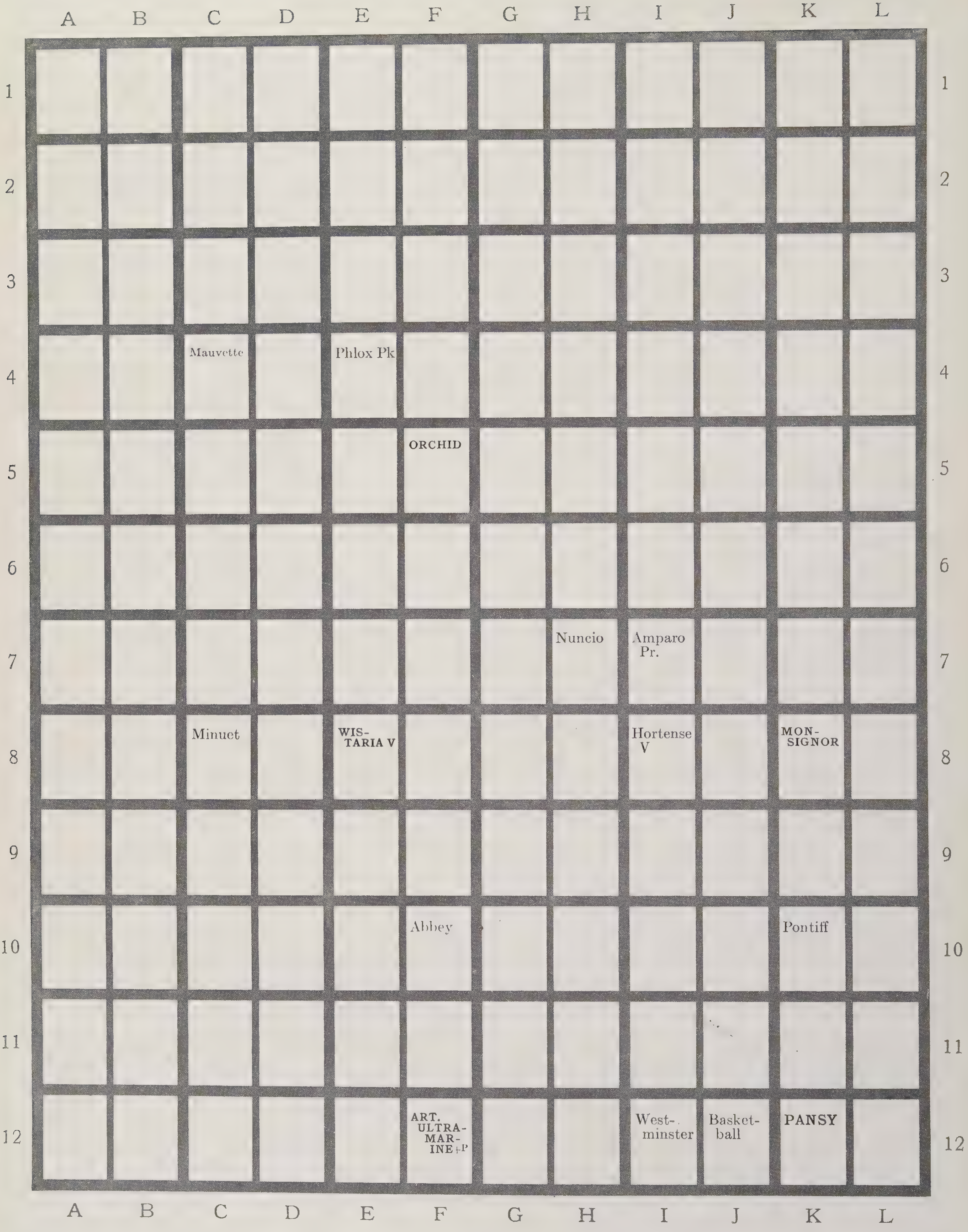
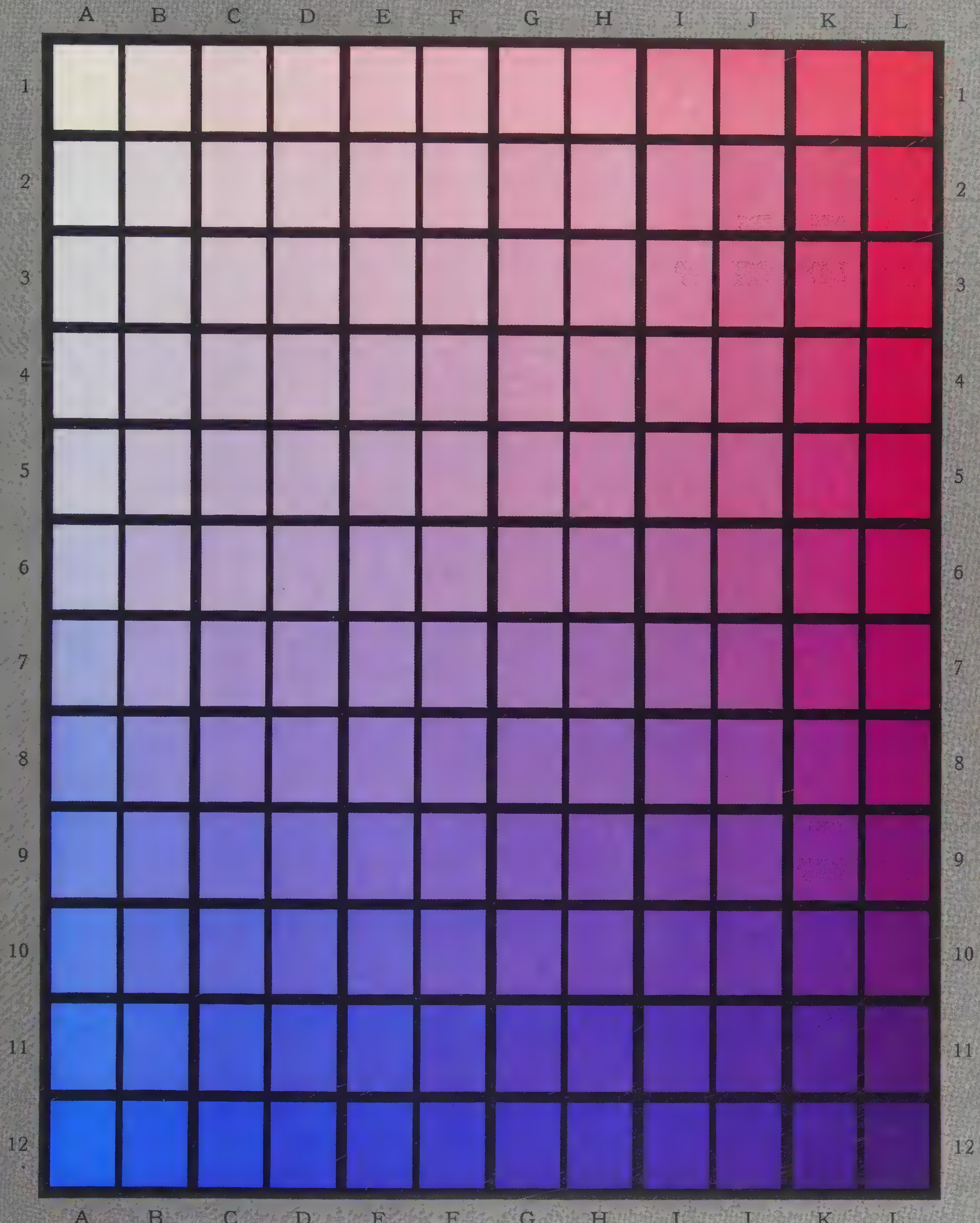
PLATE 41



	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3												
4			Mauvette		Phlox Pk							
5						**ORCHID**						
6												
7								Nuncio	Amparo Pr.			
8			Minuet		**WISTARIA V**				Hortense V		**MONSIGNOR**	
9												
10						Abbey					Pontiff	
11												
12						**ART. ULTRAMARINE+P**			Westminster	Basketball	**PANSY**	

PLATE 41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	A	B	C	D	E	F	G	H	I	J	K	L	
1		Zephyr		Dawn		Nymph	**ORCHID PK**						1
2													2
3													3
4						Morning Glory		Orchadee					4
5		Afterglow+						Opera Mauve					5
6		Vervain Verbena V.	Eventide		Daybreak			Cattleya					6
7		Chicory Bl				Hyacinth	Viola		Chinese V	Thistle	Patricia		7
8	Flax-flower Bl	Campanula Blue	Wistaria Blue						Purple Heather		Hepatica		8
9								Foxglove					9
10		Commelina Bl.	**CORNFLOWER**				Columbine Blue		Violine	Campanula	Wood Violet		10
11											Clematis		11
12			Lyons Bl							Lobelia	Perilla	Seville	12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 42

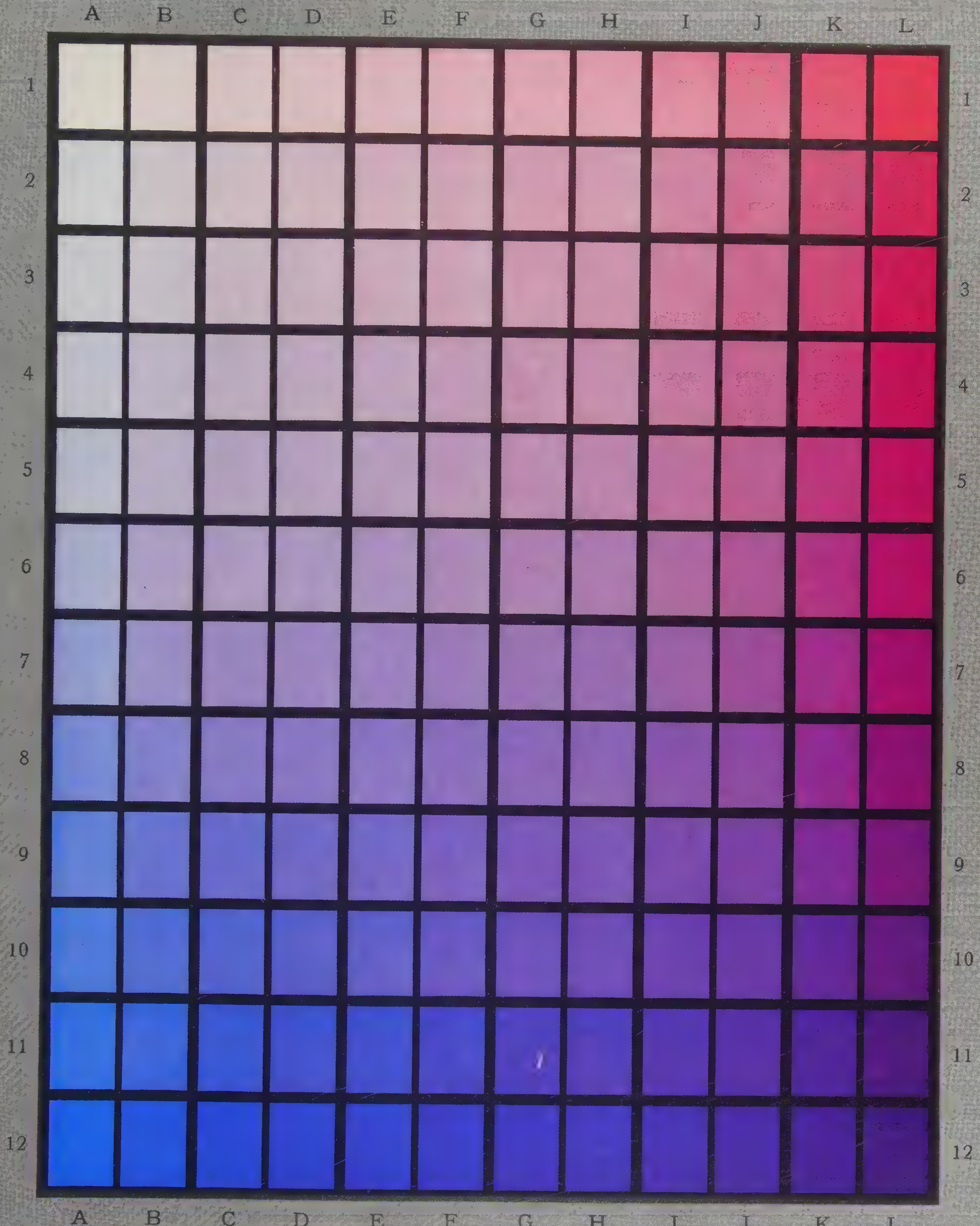
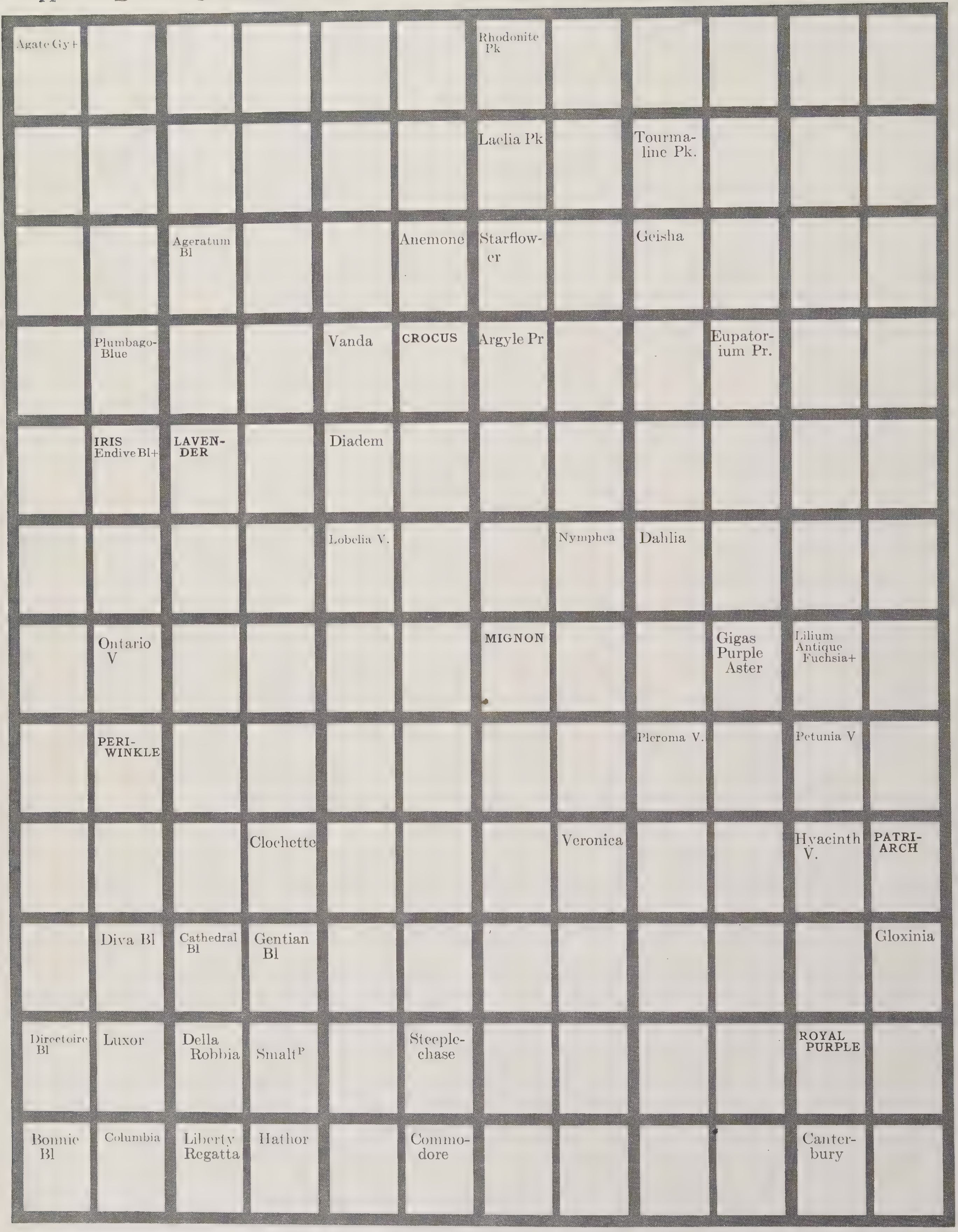
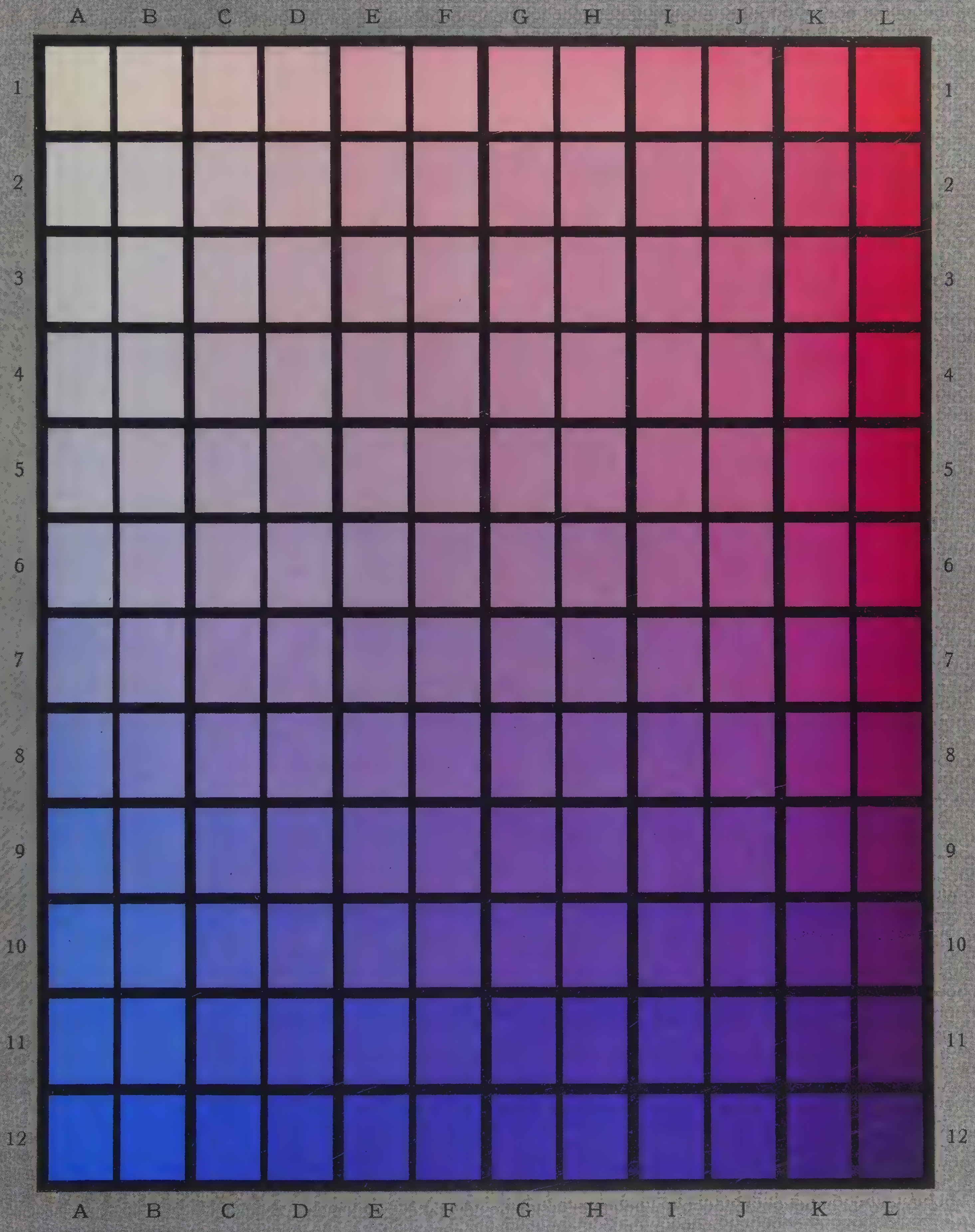


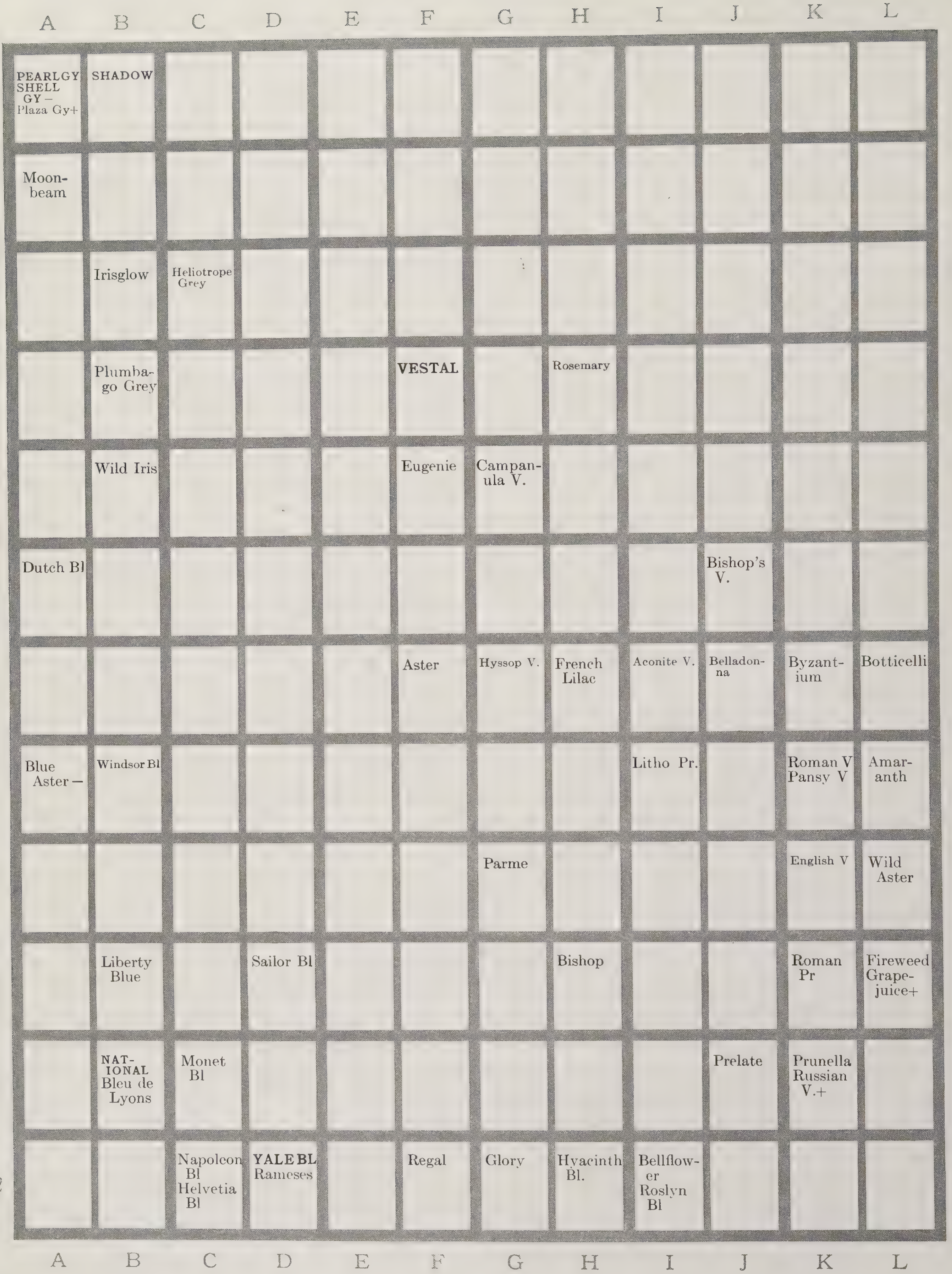
PLATE 43



	A	B	C	D	E	F	G	H	I	J	K	L
1	Agate Gy+						Rhodonite Pk					
2							Laelia Pk		Tourmaline Pk.			
3			Ageratum Bl			Anemone	Starflower		Geisha			
4		Plumbago-Blue			Vanda	**CROCUS**	Argyle Pr			Eupatorium Pr.		
5		**IRIS** Endive Bl+	**LAVENDER**		Diadem							
6					Lobelia V.			Nymphea	Dahlia			
7		Ontario V					**MIGNON**			Gigas Purple Aster	Lilium Antique Fuchsia+	
8		**PERIWINKLE**							Pleroma V.		Petunia V	
9				Clochette				Veronica			Hyacinth V.	**PATRIARCH**
10		Diva Bl	Cathedral Bl	Gentian Bl								Gloxinia
11	Directoire Bl	Luxor	Della Robbia	Smalt^{P}		Steeplechase					**ROYAL PURPLE**	
12	Bonnie Bl	Columbia	Liberty Regatta	Hathor		Commodore					Canterbury	

Plate 43





	A	B	C	D	E	F	G	H	I	J	K	L
1	**PEARLGY** **SHELL GY**– Plaza Gy+	**SHADOW**										
2	Moonbeam											
3		Irisglow	Heliotrope Grey									
4		Plumbago Grey				**VESTAL**		Rosemary				
5		Wild Iris				Eugenie	Campanula V.					
6	Dutch Bl									Bishop's V.		
7						Aster	Hyssop V.	French Lilac	Aconite V.	Belladonna	Byzantium	Botticelli
8	Blue Aster –	Windsor Bl							Litho Pr.		Roman V Pansy V	Amaranth
9							Parme				English V	Wild Aster
10		Liberty Blue		Sailor Bl				Bishop			Roman Pr	Fireweed Grapejuice+
11		**NATIONAL** Bleu de Lyons	Monet Bl							Prelate	Prunella Russian V.+	
12			Napoleon Bl Helvetia Bl	**YALE BL** Rameses		Regal	Glory	Hyacinth Bl.	Bellflower Roslyn Bl			

PLATE 44

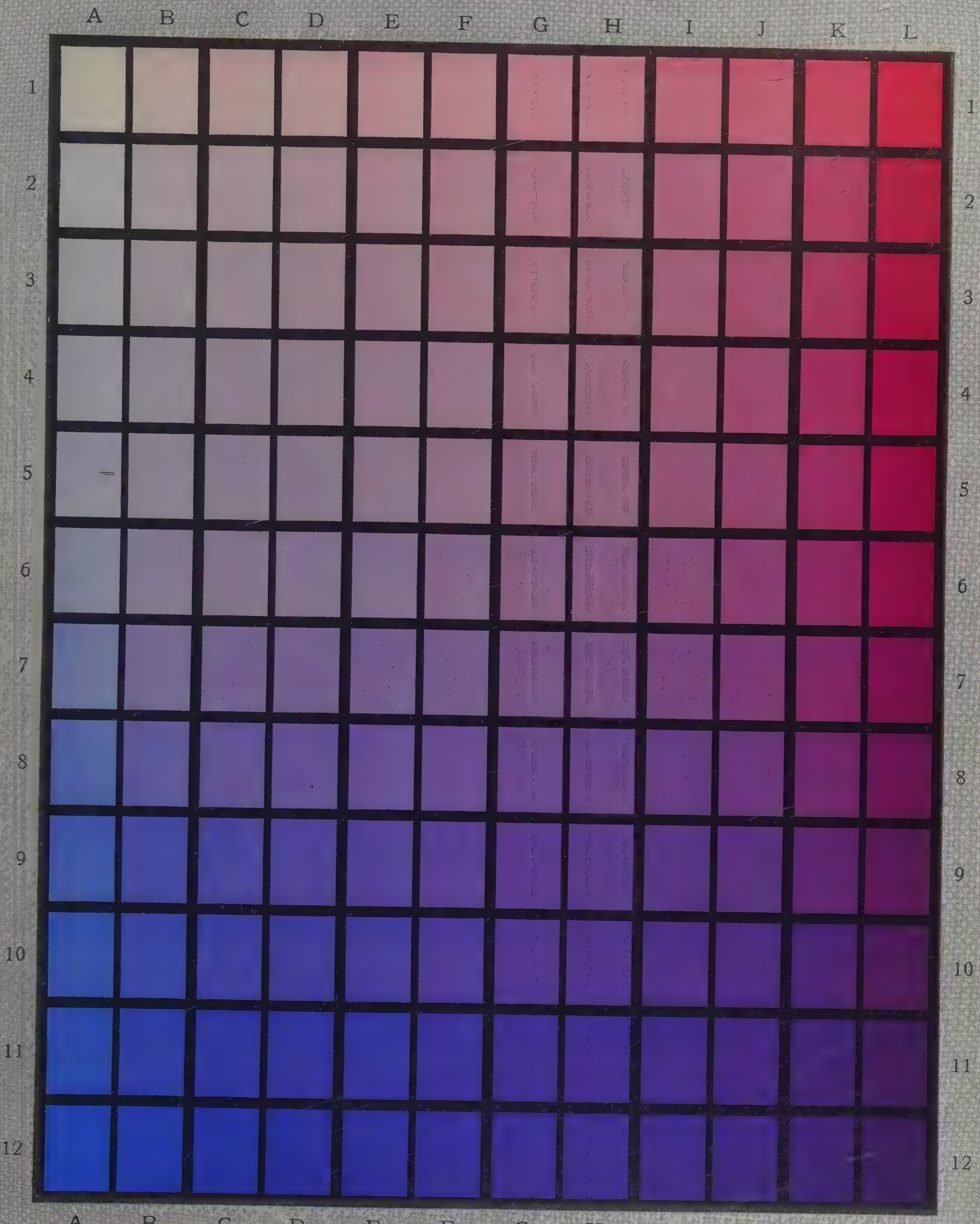


Plate 45

	A	B	C	D	E	F	G	H	I	J	K	L
1	Aluminum	**DOVE GREY**	**EVEN-GLOW**			Mello-Mauve					Heather	
2		Grey Dawn Cloud Grey – **ZINC**+										
3	Platinum	Quaker Sea Mist –										
4	Denver Battleship Grey											
5							Crushed Violets					
6								Old Lilac	Livid Pr			
7	Blue Orchid				Ramier Bl							Cygnet
8							Digitalis			**AMETHYST**		
9		Pervenche								Old Helio		
10							Imperial Pr.	Pimlico			Mulberry Purple	**IMPERIAL** Cotinga Pr.
11							**DARK WEDGWOOD** Flame Bl			Damson	Toga	Eminence Adamia
12		Olympian Bl	Pharaoh	Coolie+				Corsican Bl+		Elderberry	Concord	Vatican

Plate 45

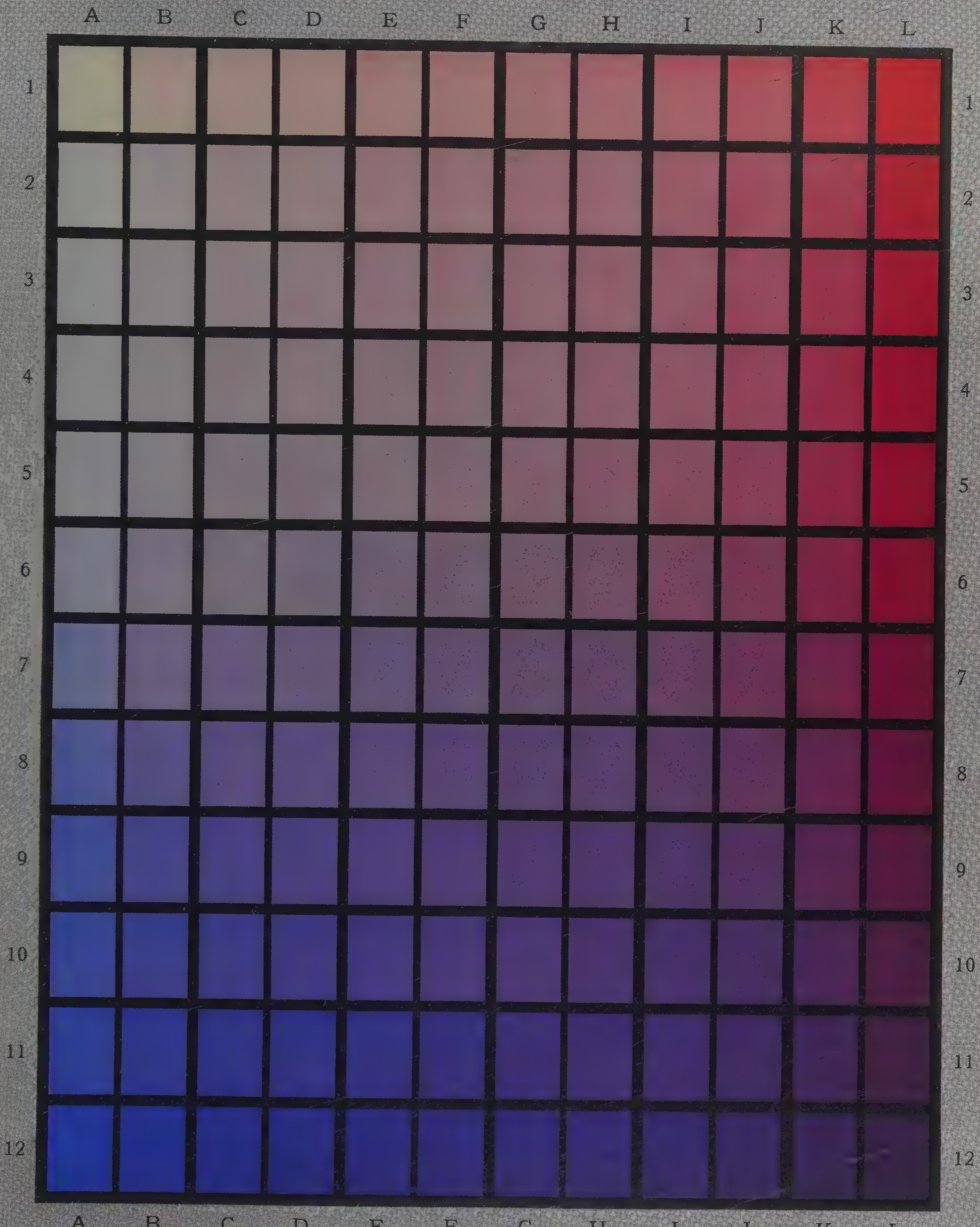

A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12

PLATE 46

	A	B	C	D	E	F	G	H	I	J	K	L	
1	Cement National Grey	Metallic Grey Granite+	Shadow										1
2	Frost Grey Chateau Grey	Quaker Drab	Mauve Dust							Corinth			2
3		Smoked Pearl										Dahlia-carmine	3
4													4
5									Old Mauve				5
6	**CADET**			Plumbago-Slate+					Slate-Purple				6
7	Swiss Bl Slate Bl				Del Monte								7
8		Heron Slate-Bl—							Yvette V			Coronation	8
9										Victoria			9
10									Monkshood			Romanesque	10
11		Legion Bl+					Roma Bl+				Petunia	Prune Pr Loganberry+	11
12	Freedom				Madeleine Bl	Neapolitan Bl+	**MARINE PURPLE NAVY+**	Banner+	Grape Bl Flag		Bramble	Fluorite V.	12
	A	B	C	D	E	F	G	H	I	J	K	L	

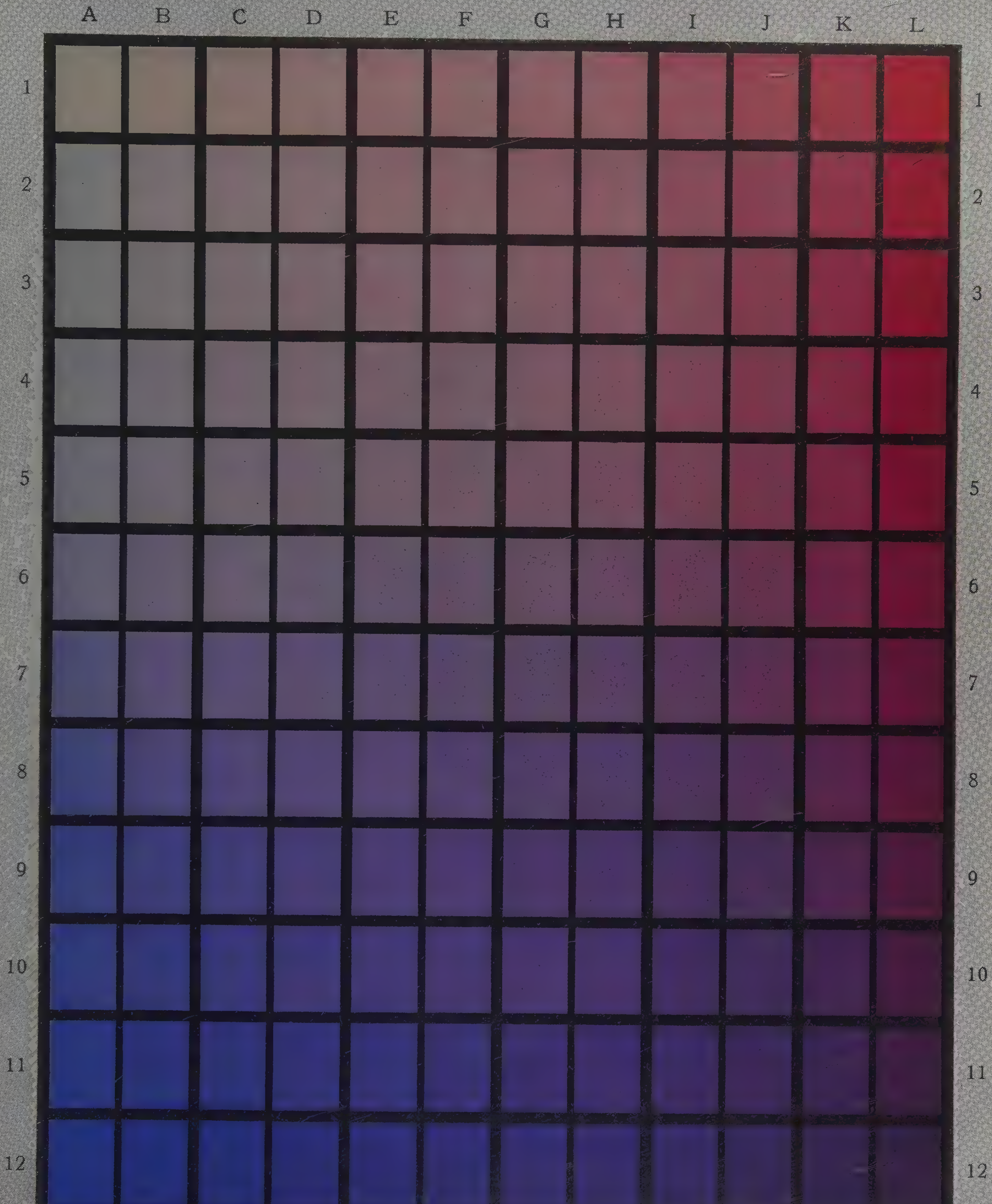

A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12

PLATE 47

	A	C	E	H	J	L	
1	Sea Hawk Jaffi Chickadee Gray+	Rosetta	**BLUE FOX**				1
2	**PELICAN** Charcoal Grey Dove+				Indian Purple	Bokhara+	2
3	Griffin	Shark			Perilla Purple		3
4	**STEEL** Davy's Grey^{P}						4
5		Leadville					5
6		**SLATE+** Dusk					6
7							7
8					**PRUNE+**		8
9	**PAYNE'S GREY**^{P}				**PLUM**	Cyclamen	9
10		**REGIMENTAL**			Windsor	Dante+	10
11	Veteran Ink Blue+	**NAVY 1+**	Seaman Blue+	Nightshade	Huckleberry+		11
12		Geneva Blue	**HOMAGE BLUE** Scotch Blue	**INDEPENDENCE** Urania Blue	Grape Cathedral	Hortensia	12
	A	C	E	H	J	L	

Plate 47

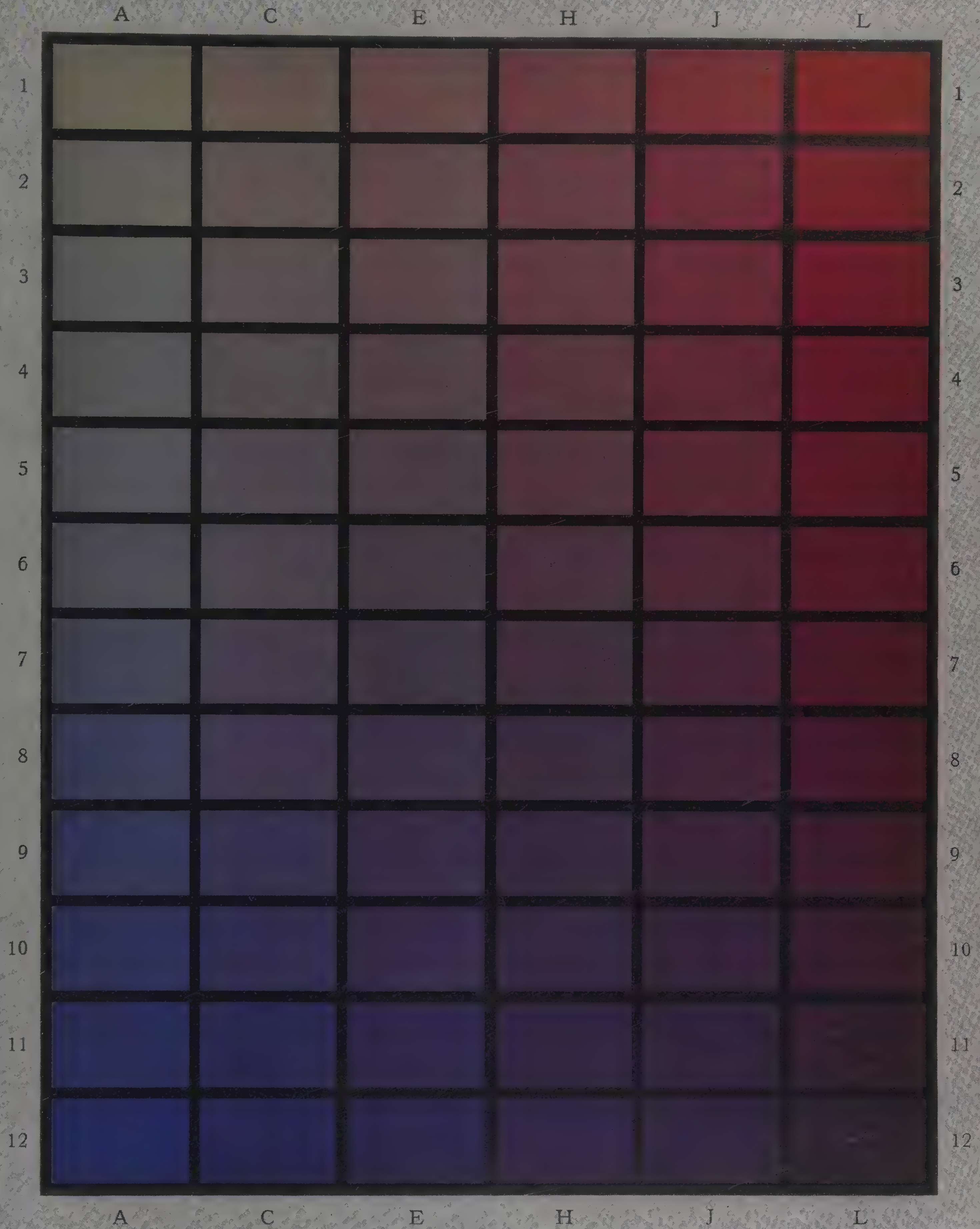
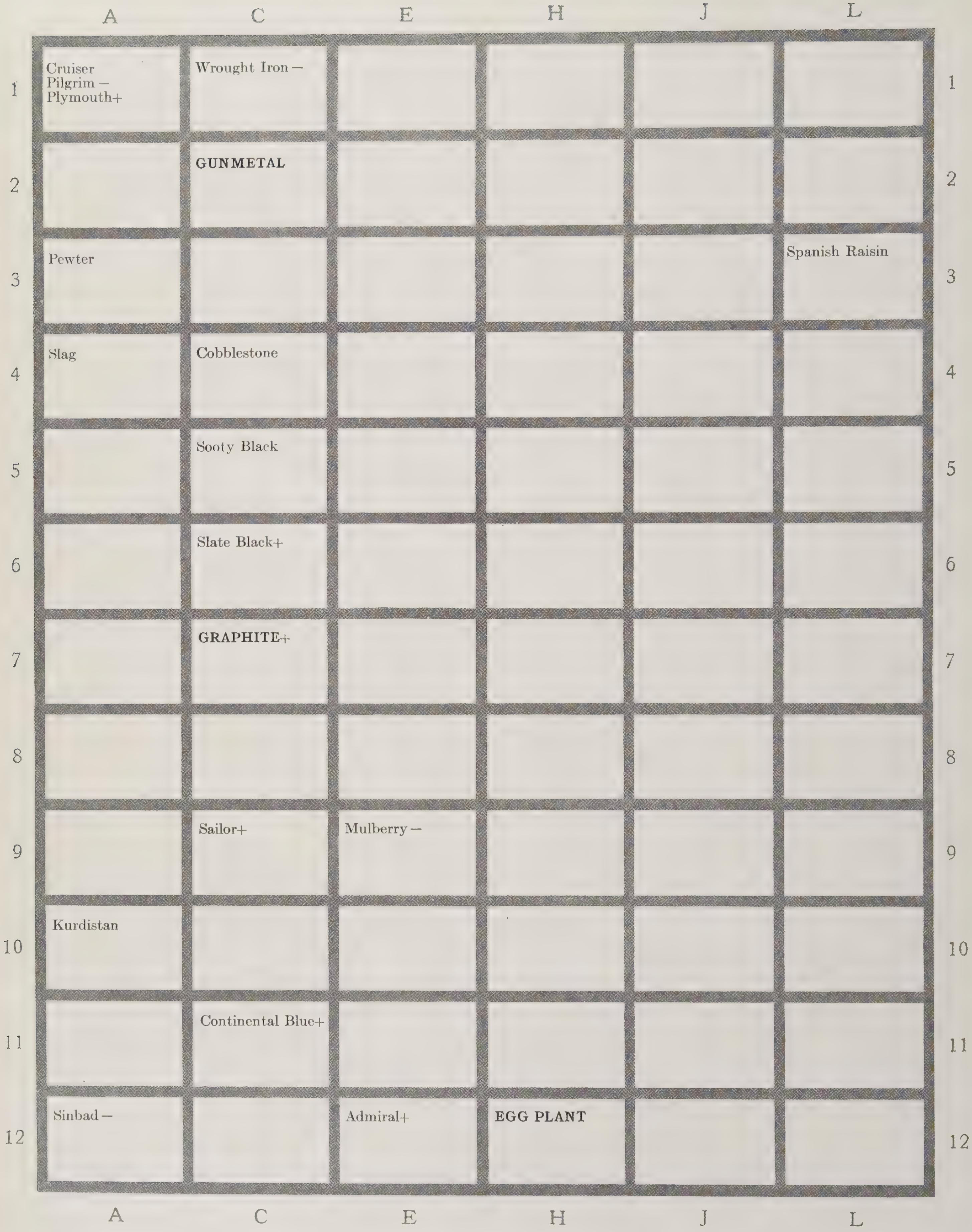


PLATE 48



	A	C	E	H	J	L	
1	Cruiser Pilgrim – Plymouth+	Wrought Iron –					1
2		**GUNMETAL**					2
3	Pewter					Spanish Raisin	3
4	Slag	Cobblestone					4
5		Sooty Black					5
6		Slate Black+					6
7		**GRAPHITE+**					7
8							8
9		Sailor+	Mulberry –				9
10	Kurdistan						10
11		Continental Blue+					11
12	Sinbad –		Admiral+	**EGG PLANT**			12
	A	C	E	H	J	L	

PLATE 48

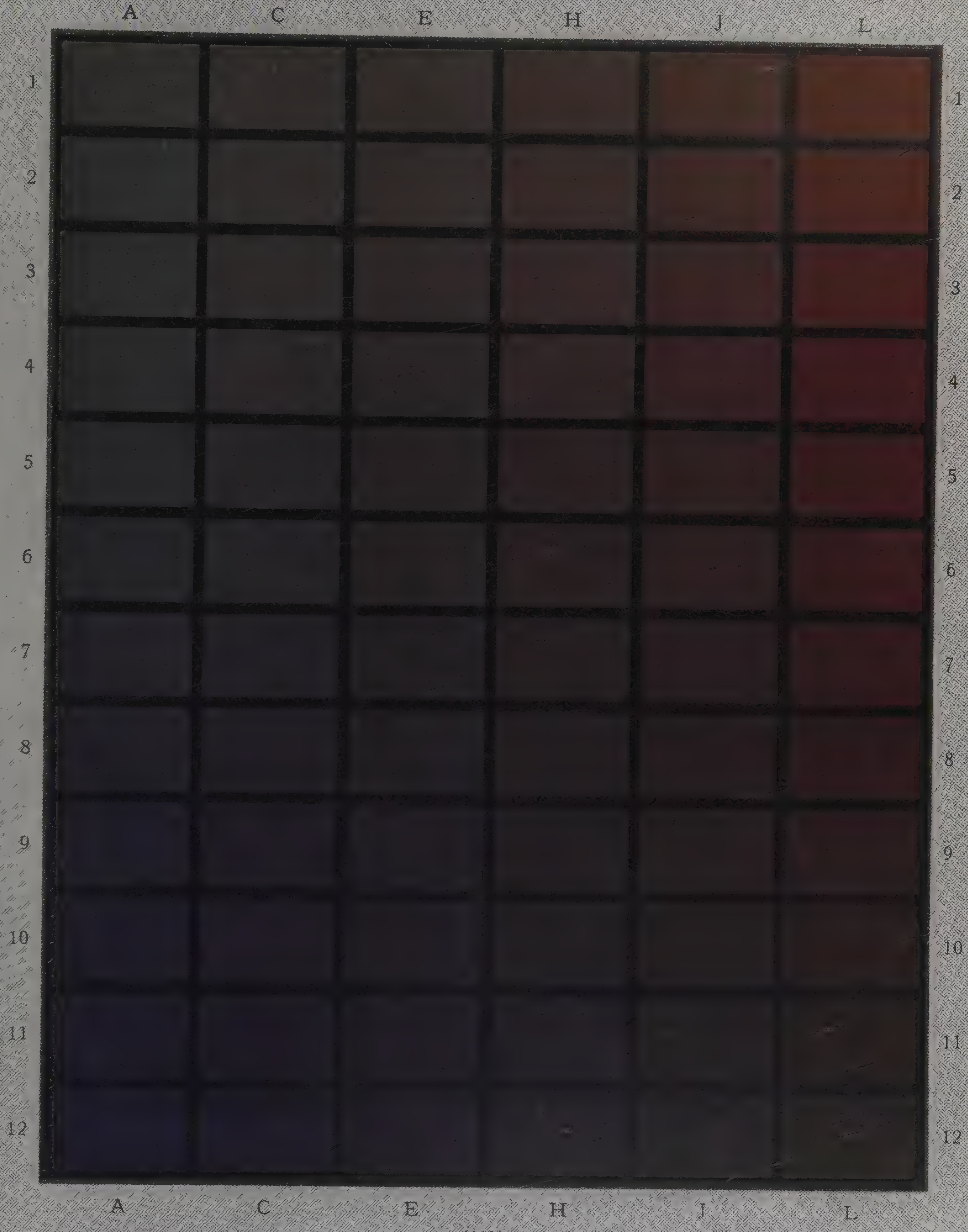

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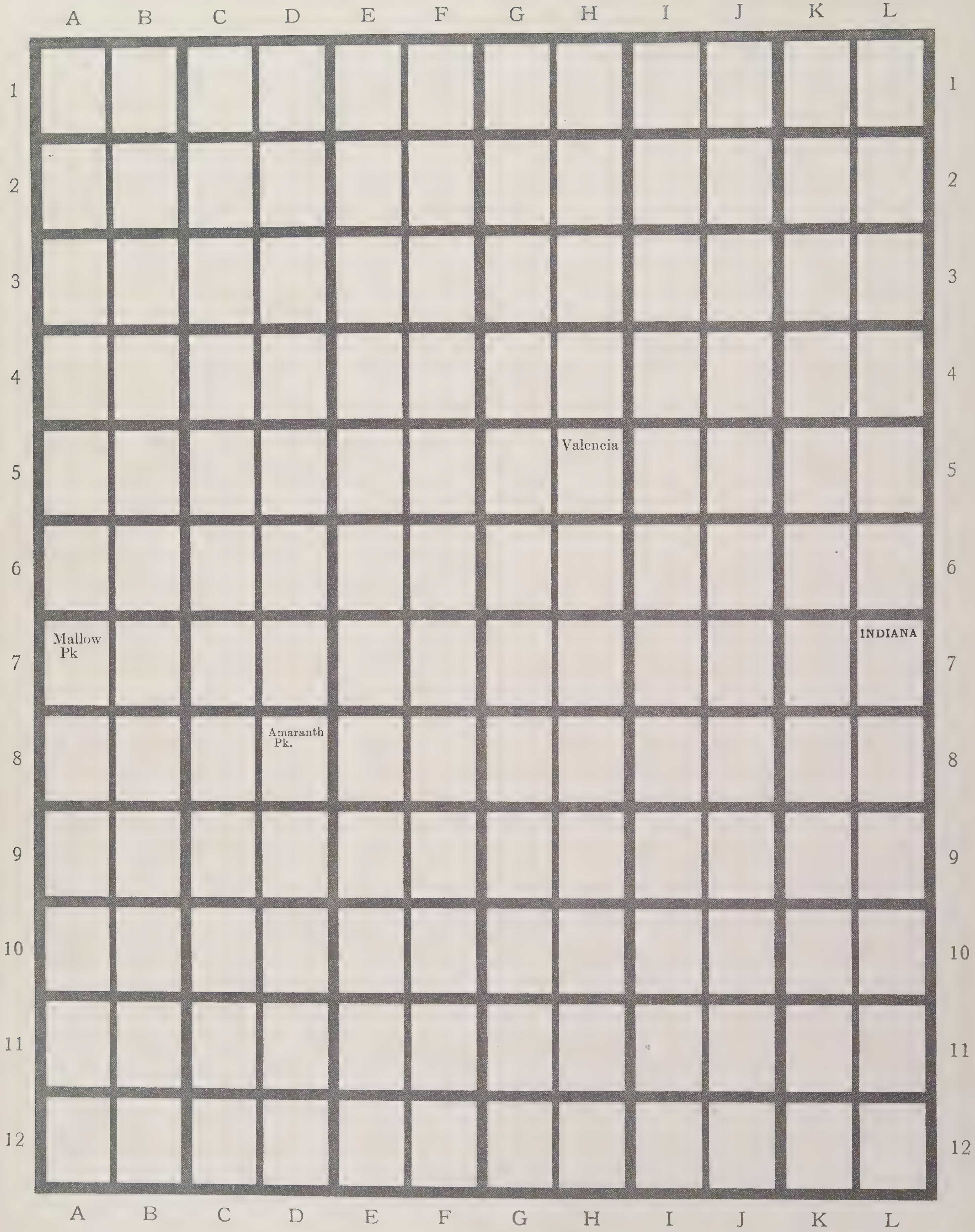
Plate 49


A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12
Valencia
Mallow Pk
INDIANA
Amaranth Pk.

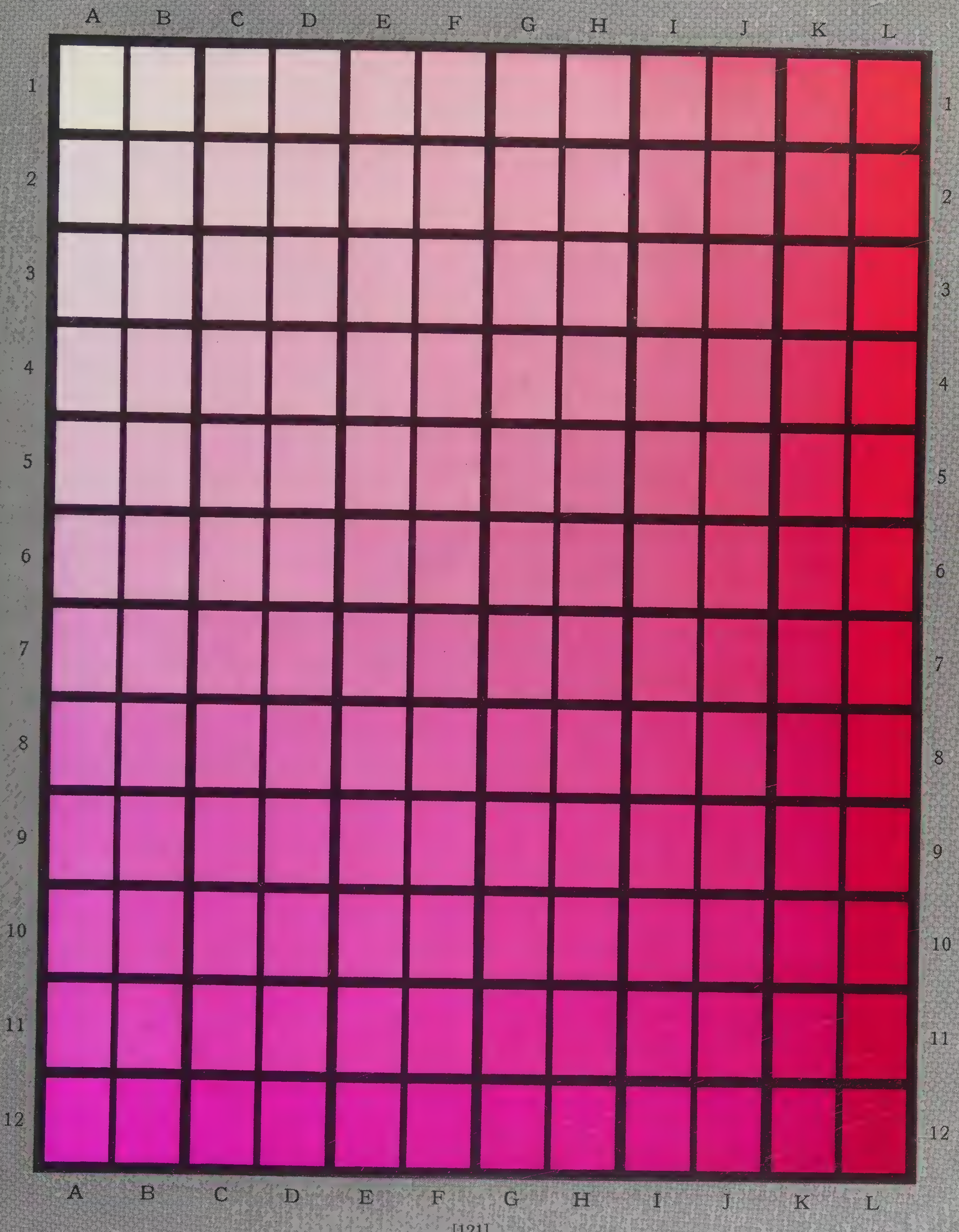

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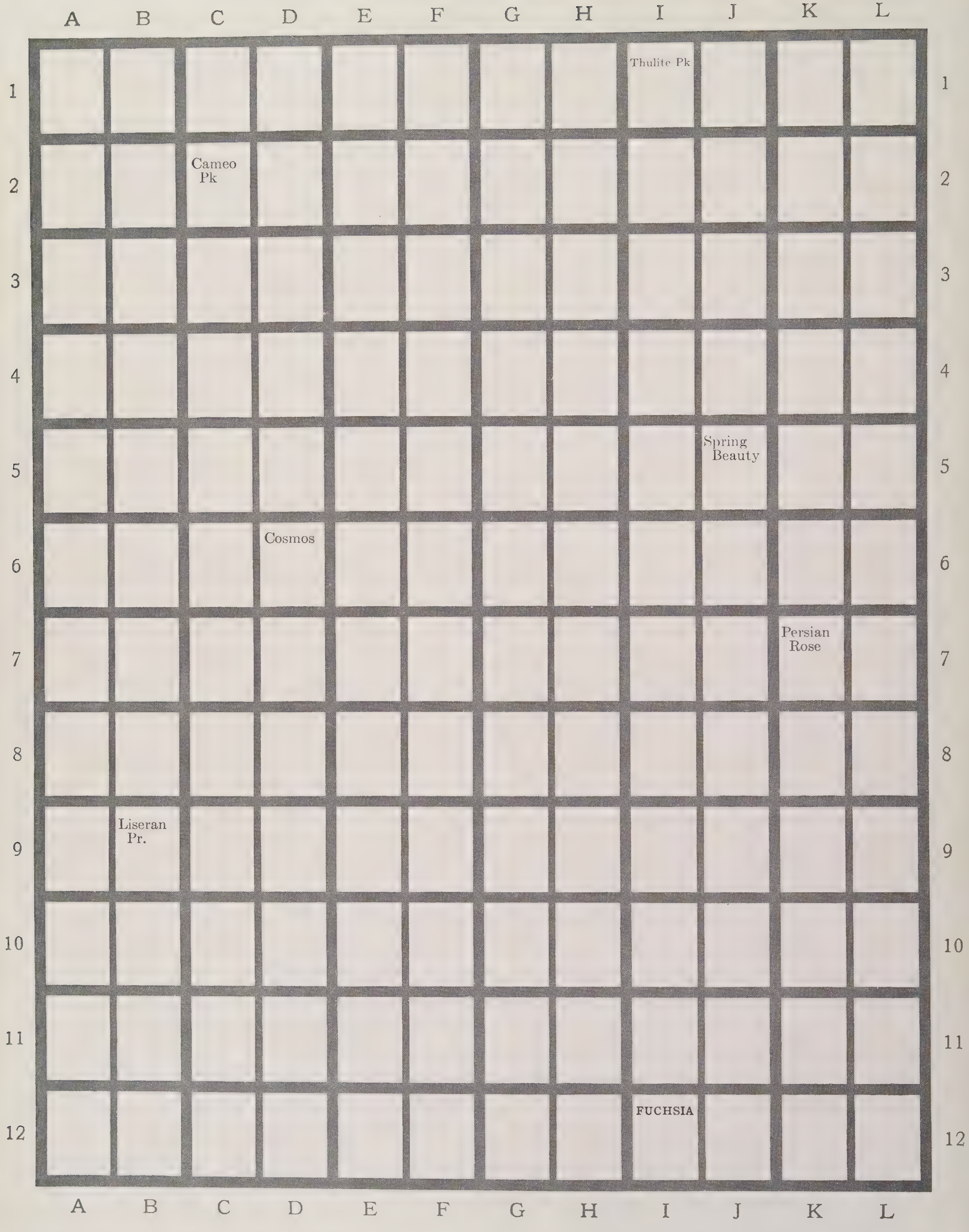
PLATE 50



	A	B	C	D	E	F	G	H	I	J	K	L	
1									Thulite Pk				1
2			Cameo Pk										2
3													3
4													4
5										Spring Beauty			5
6				Cosmos									6
7											Persian Rose		7
8													8
9		Liseran Pr.											9
10													10
11													11
12									**FUCHSIA**				12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 50

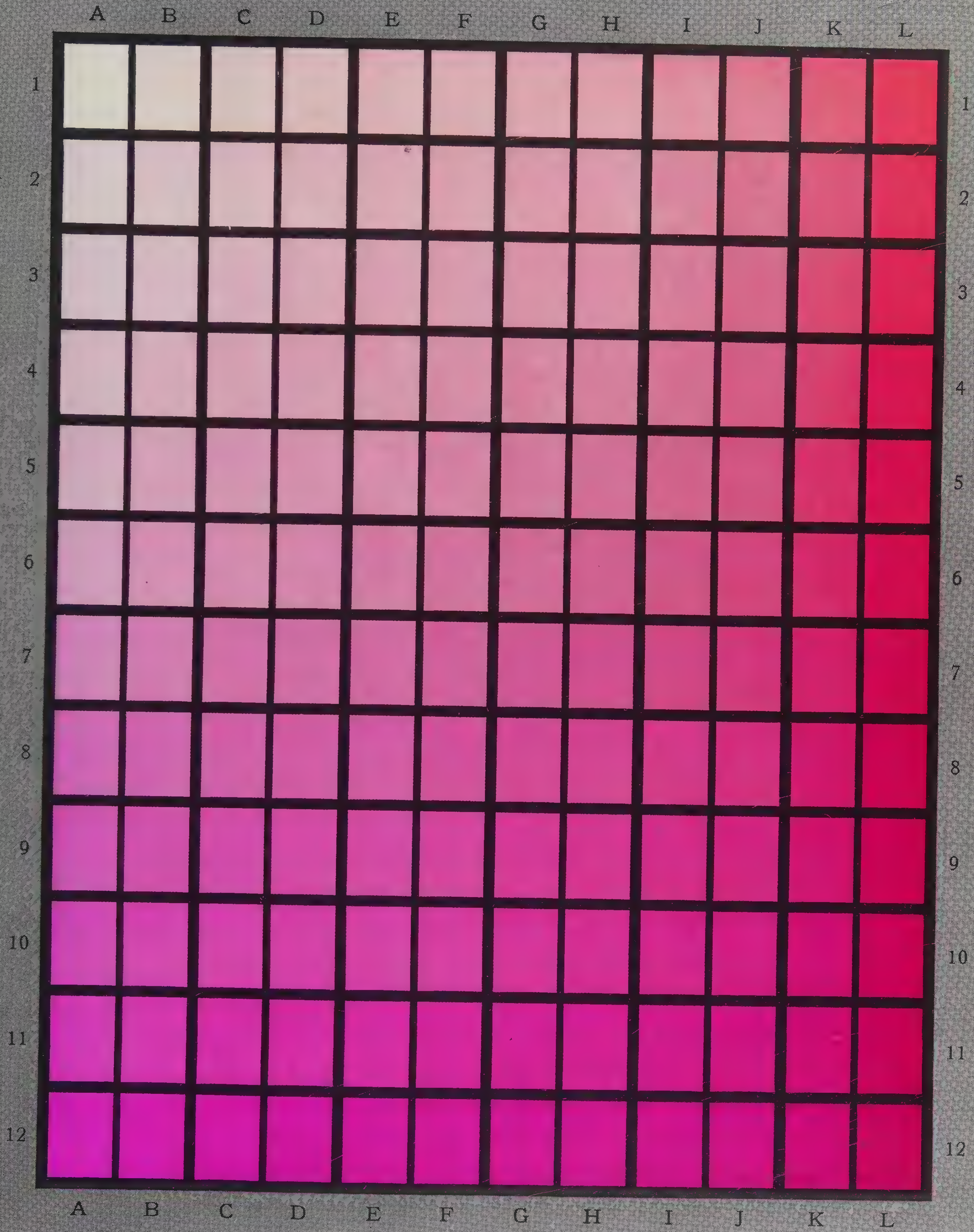

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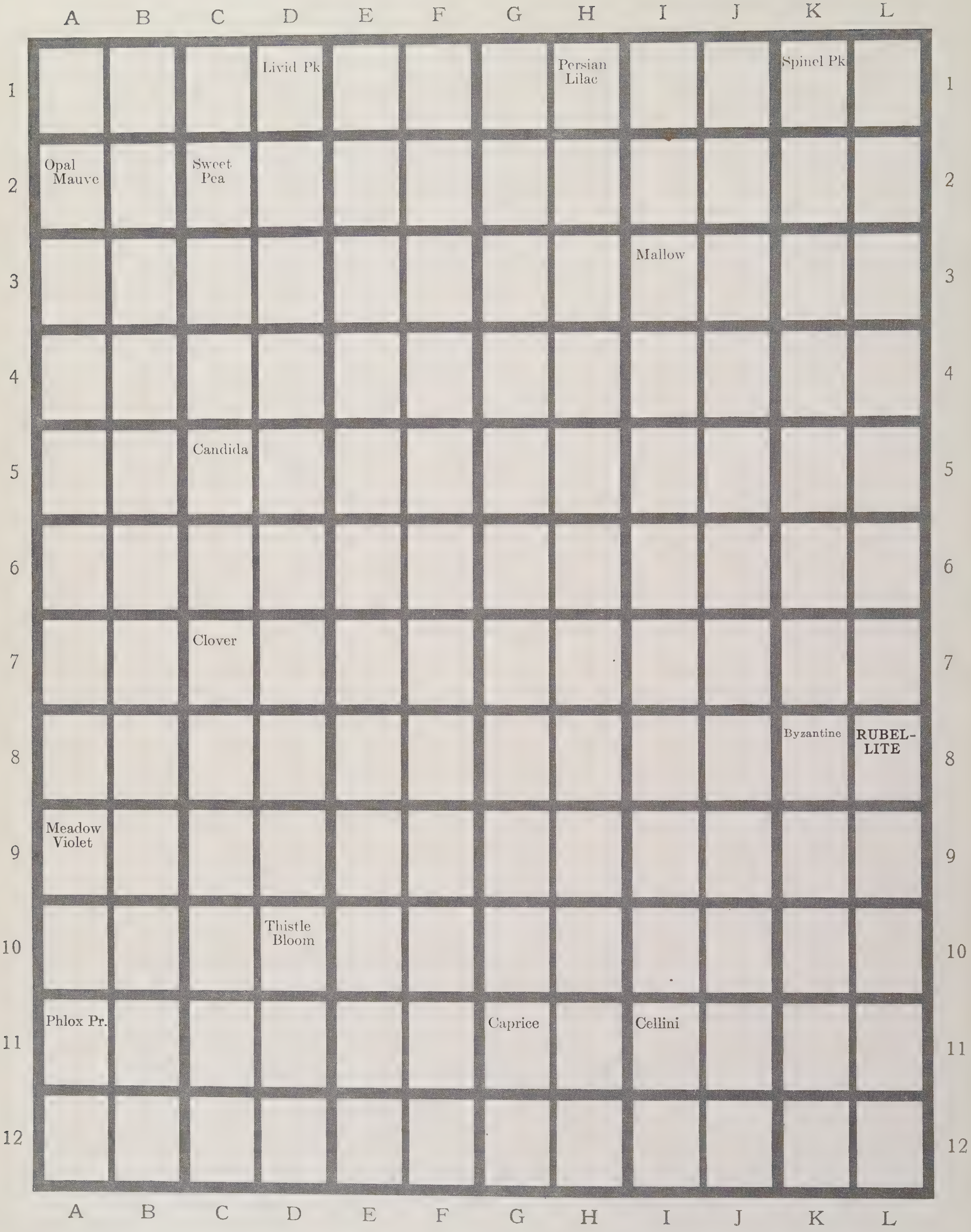
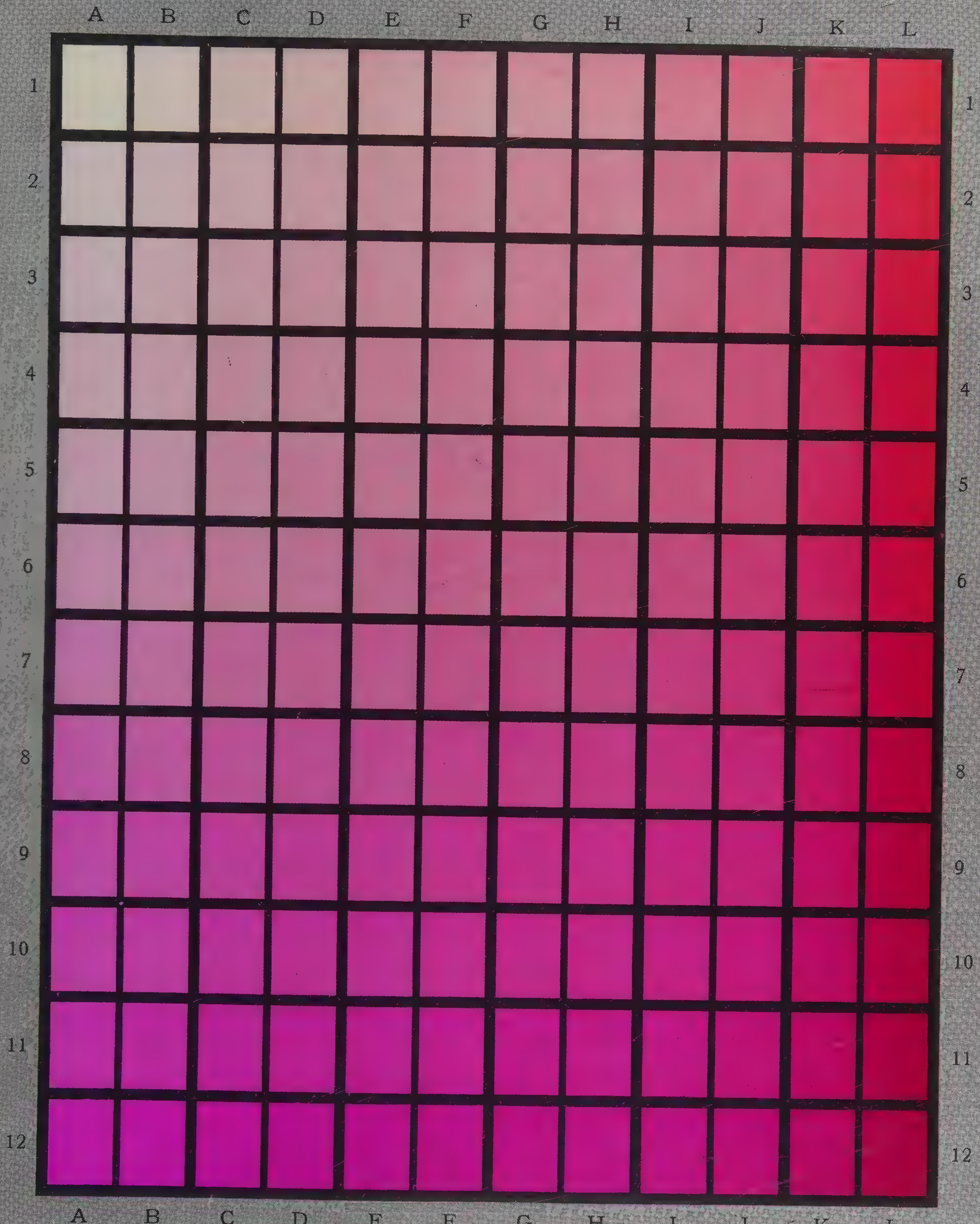
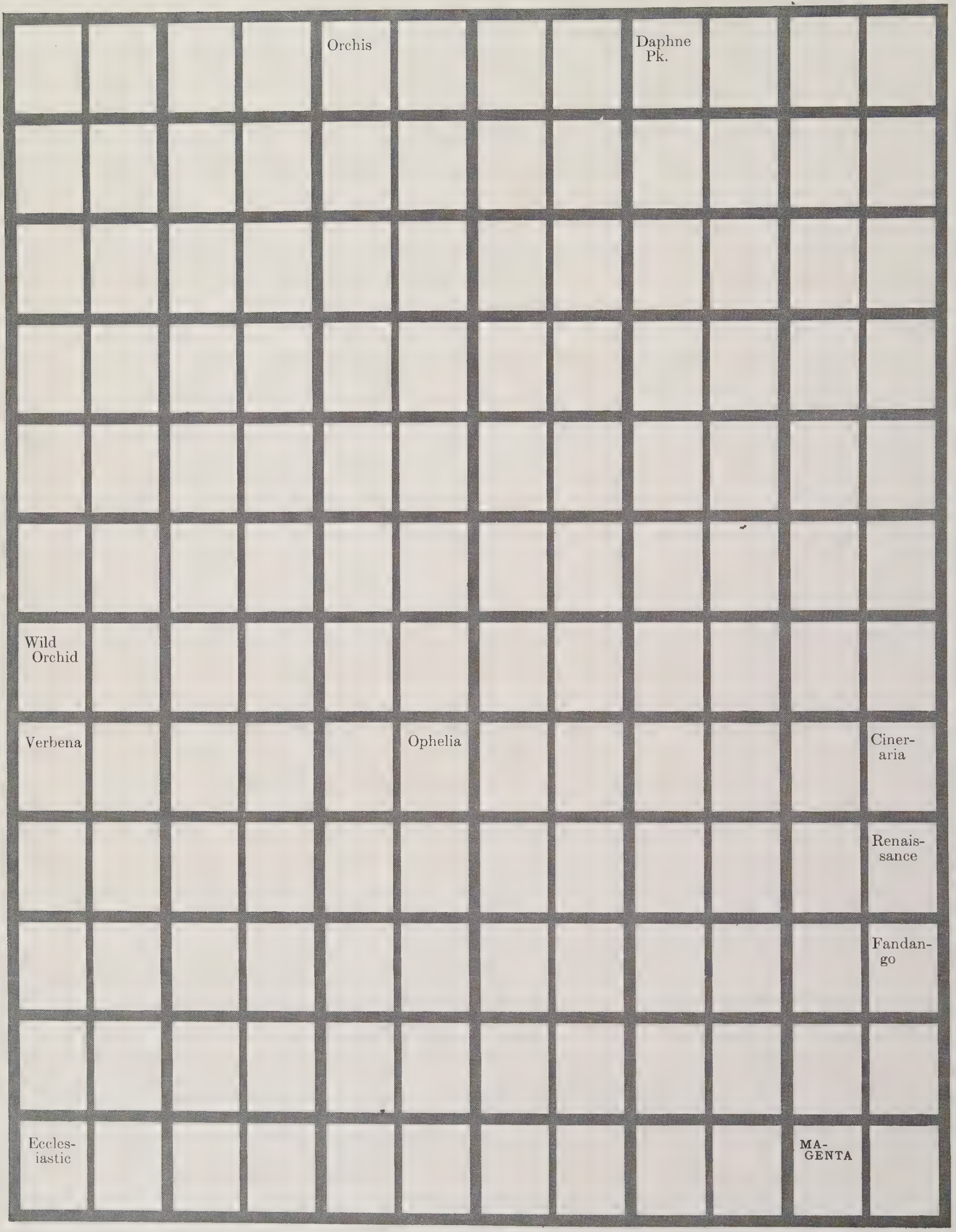
Plate 51



	A	B	C	D	E	F	G	H	I	J	K	L
1				Livid Pk				Persian Lilac			Spinel Pk	
2	Opal Mauve		Sweet Pea									
3									Mallow			
4												
5			Candida									
6												
7			Clover									
8											Byzantine	**RUBELLITE**
9	Meadow Violet											
10				Thistle Bloom								
11	Phlox Pr.						Caprice		Cellini			
12												

PLATE 51


A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12



	A	B	C	D	E	F	G	H	I	J	K	L	
1					Orchis				Daphne Pk.				1
2													2
3													3
4													4
5													5
6													6
7	Wild Orchid												7
8	Verbena					Ophelia						Cineraria	8
9												Renaissance	9
10												Fandango	10
11													11
12	Ecclesiastic										**MAGENTA**		12
	A	B	C	D	E	F	G	H	I	J	K	L	

PLATE 52

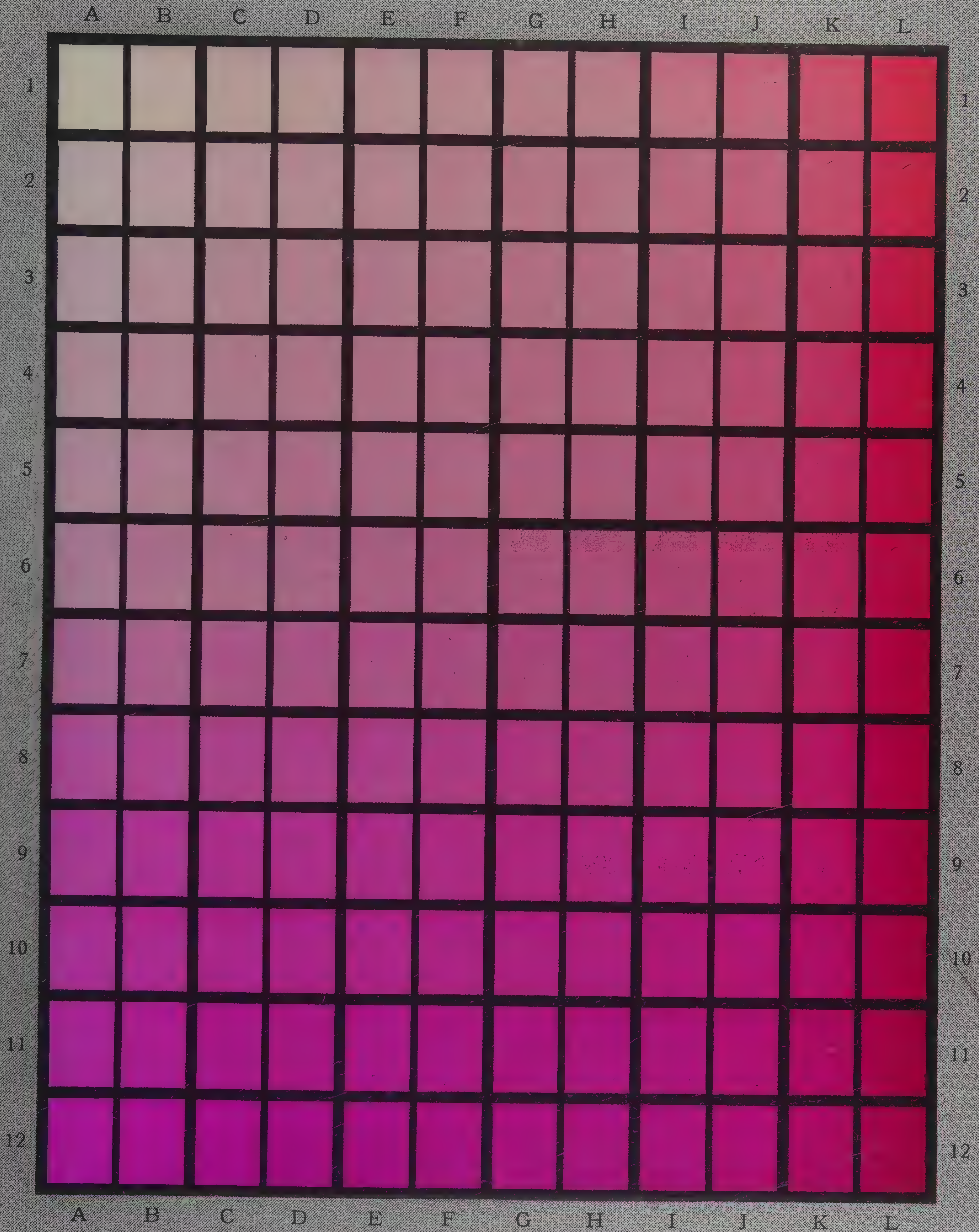

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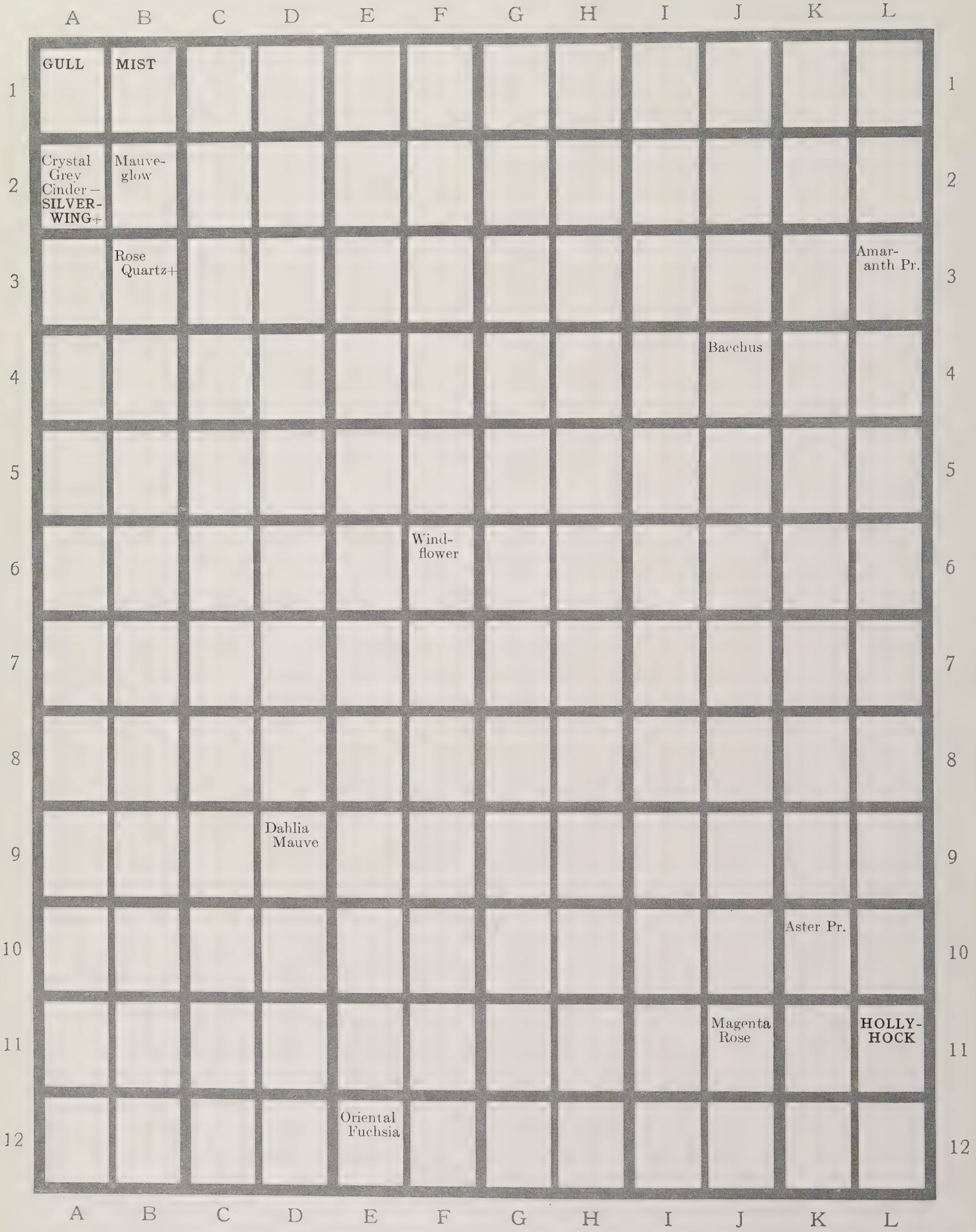
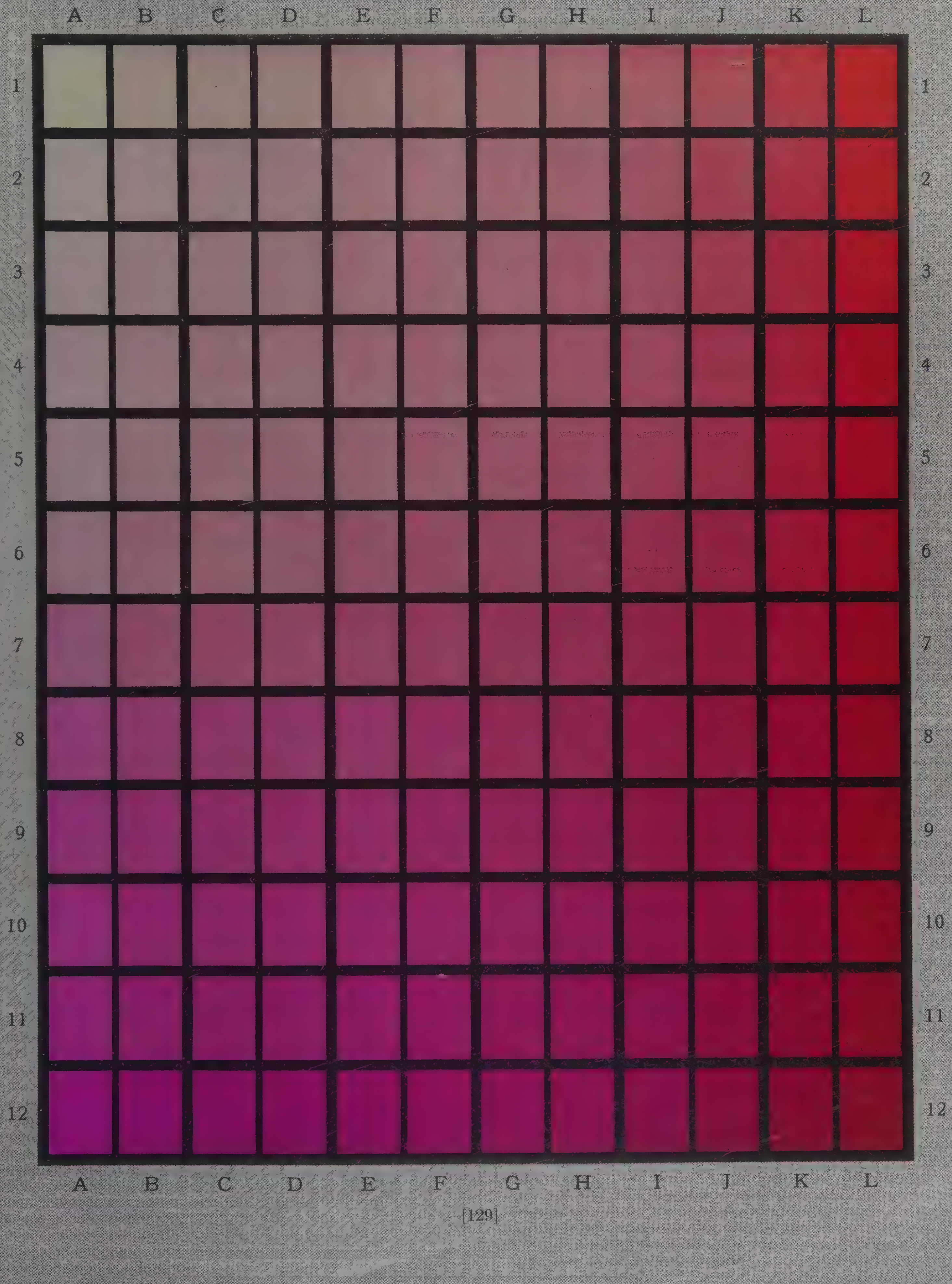
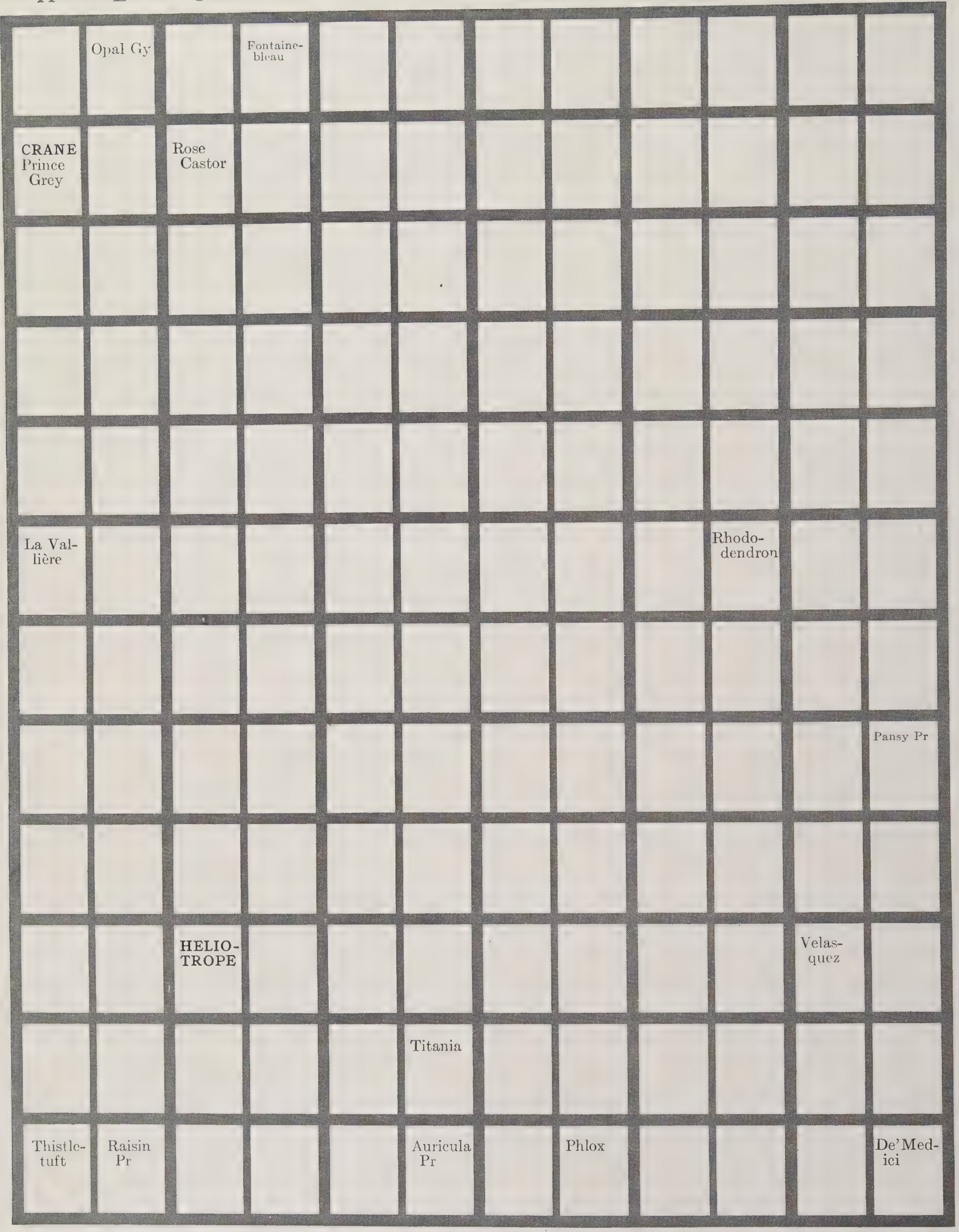
PLATE 53



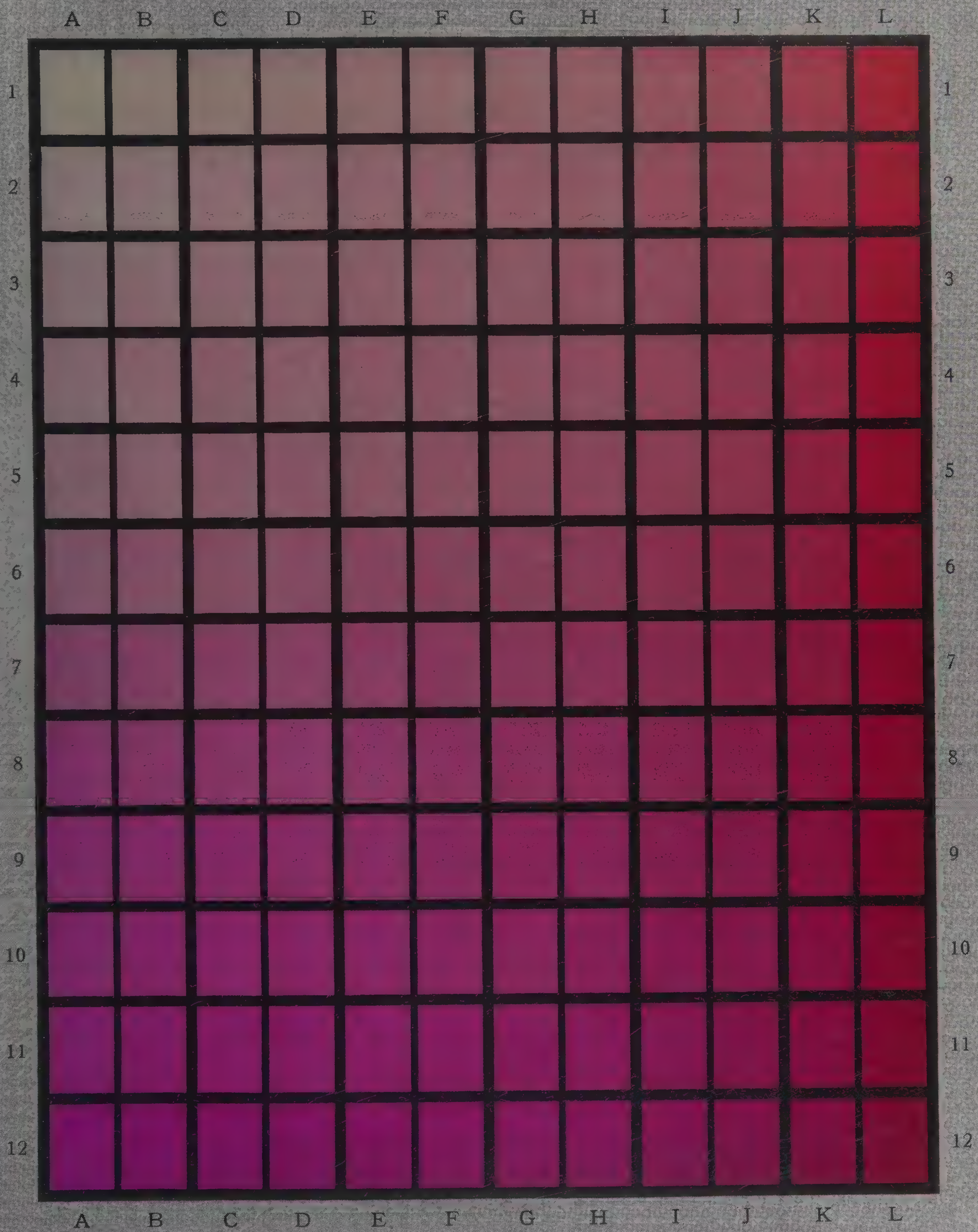
	A	B	C	D	E	F	G	H	I	J	K	L
1	**GULL**	**MIST**										
2	Crystal Grey Cinder – **SILVERWING**+	Mauveglow										
3		Rose Quartz+										Amaranth Pr.
4										Bacchus		
5												
6						Windflower						
7												
8												
9				Dahlia Mauve								
10											Aster Pr.	
11										Magenta Rose		**HOLLYHOCK**
12					Oriental Fuchsia							

PLATE 53





	A	B	C	D	E	F	G	H	I	J	K	L
1		Opal Gy		Fontainebleau								
2	**CRANE** Prince Grey		Rose Castor									
3												
4												
5												
6	La Vallière									Rhododendron		
7												
8												Pansy Pr
9												
10			**HELIOTROPE**								Velasquez	
11						Titania						
12	Thistletuft	Raisin Pr				Auricula Pr		Phlox				De'Medici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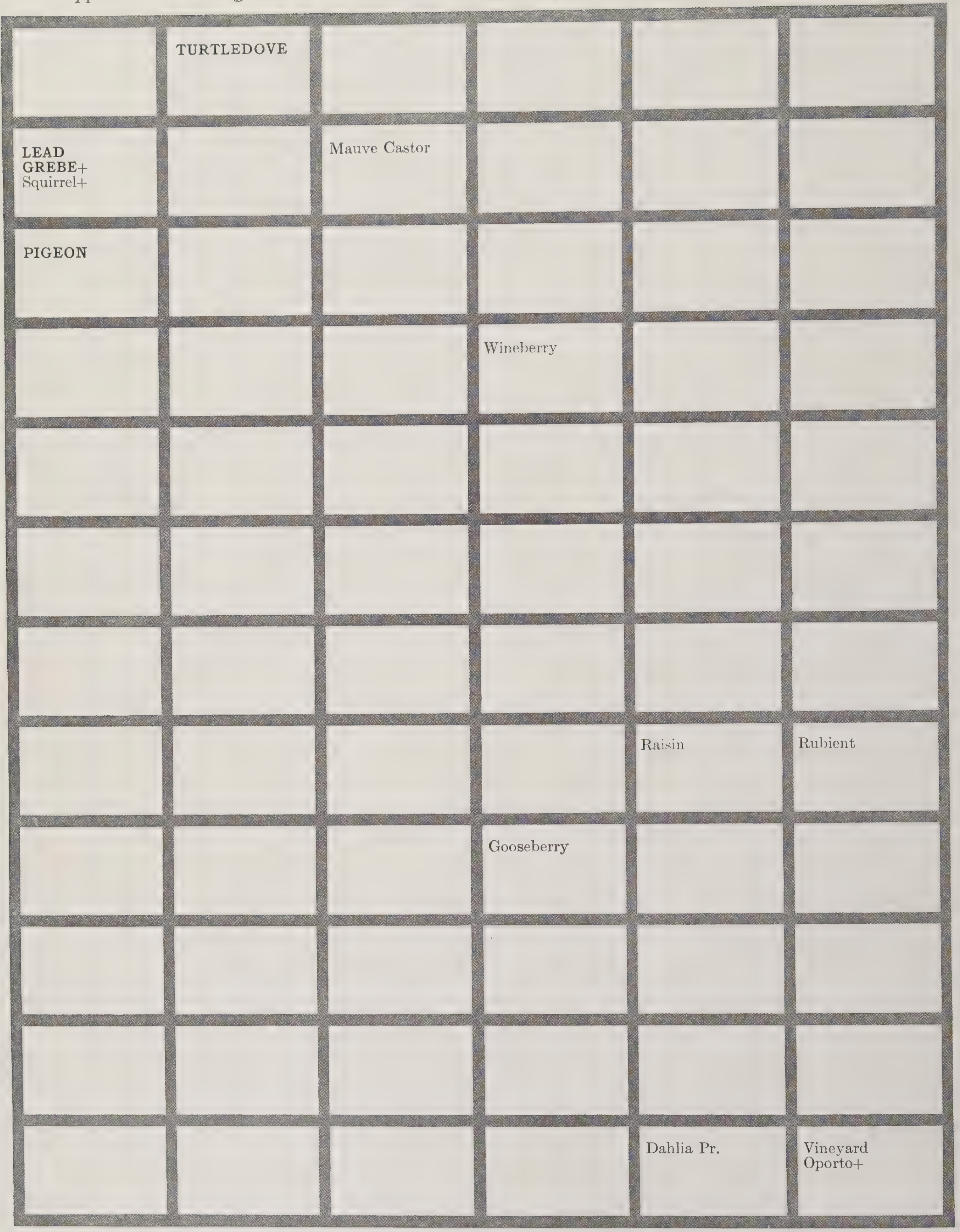


	A	C	E	H	J	L	
1		**TURTLEDOVE**					1
2	**LEAD** **GREBE+** Squirrel+		Mauve Castor				2
3	**PIGEON**						3
4				Wineberry			4
5							5
6							6
7							7
8					Raisin	Rubient	8
9				Gooseberry			9
10							10
11							11
12					Dahlia Pr.	Vineyard Oporto+	12
	A	C	E	H	J	L	

PLATE 55

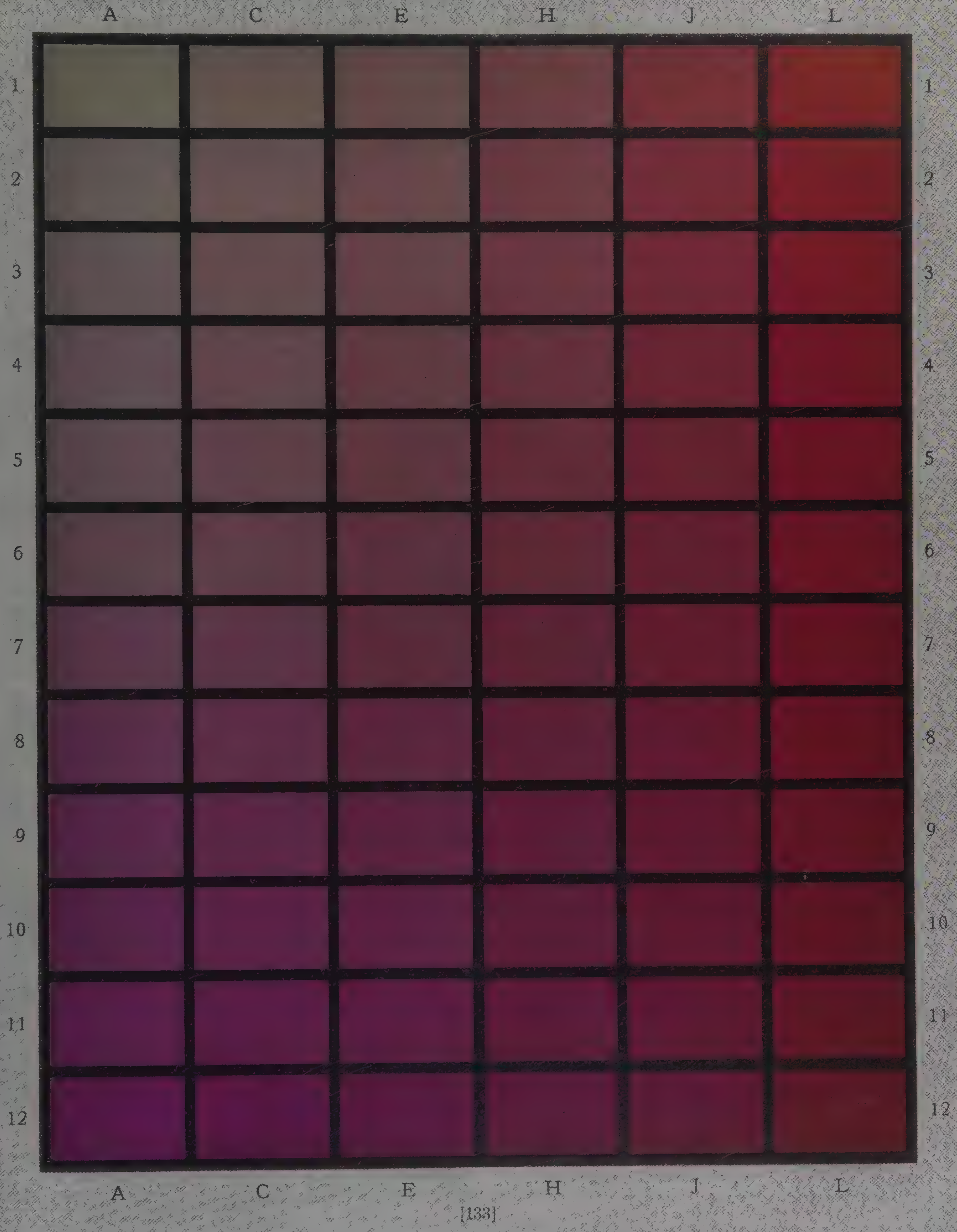
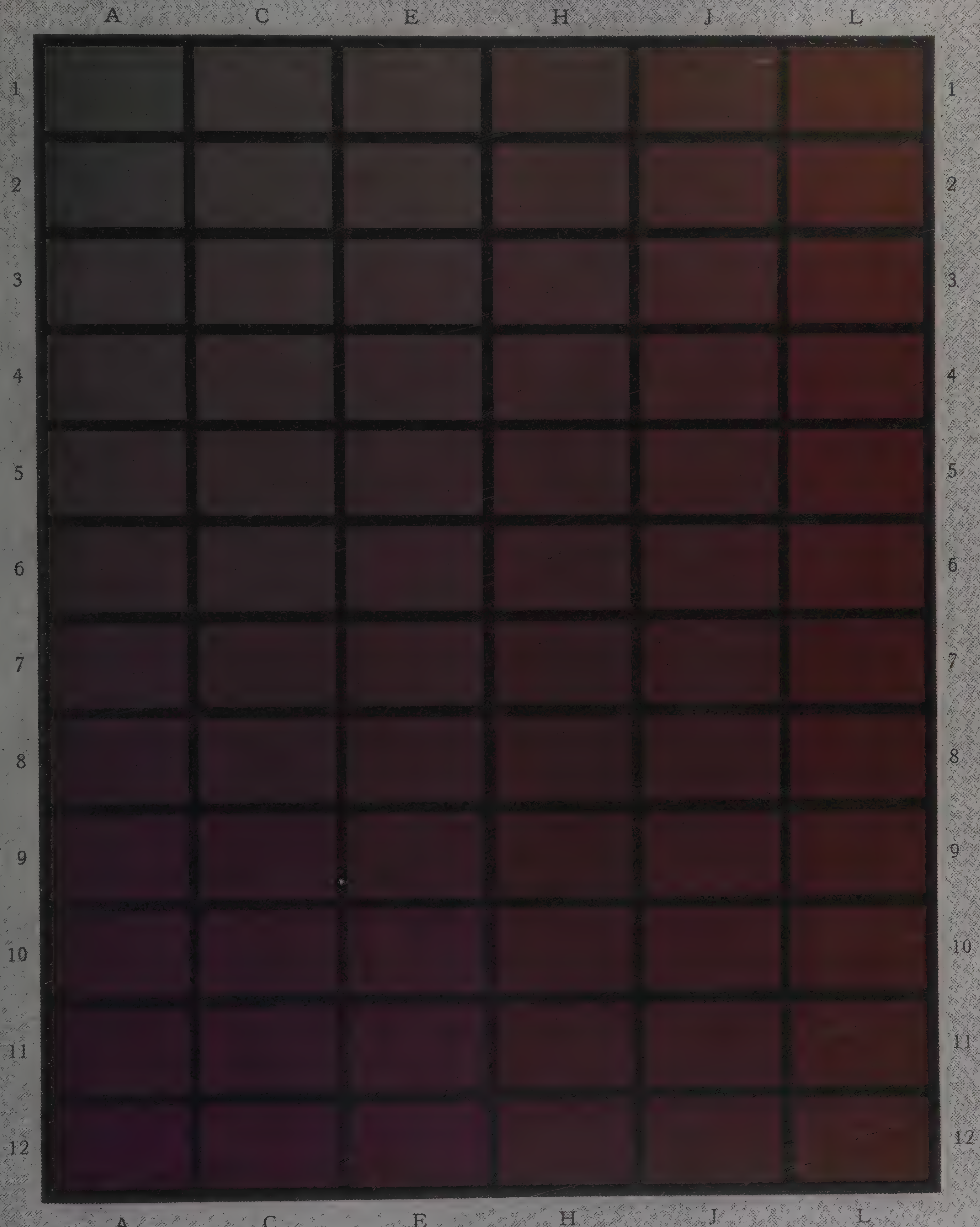


PLATE 56

	A	C	E	H	J	L	
1		Flint					1
2	Kara Dagh						2
3							3
4							4
5							5
6							6
7	Old Lavender						7
8			**BURGUNDY**				8
9				Old Burgundy			9
10					Catawba		10
11							11
12			Port	**MULBERRY FRUIT**	Port Wine		12
	A	C	E	H	J	L	

PLATE 56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BRIEF HISTORY OF COLOR STANDARDIZATION

In order to understand any attempt at color standardization, to pass a valid judgment upon its merits, or even to be entitled to hold an opinion upon the matter, it is necessary to know what has been done in the past, and how each succeeding authority has treated the work of his predecessors.

The story starts with A. G. Werner, a celebrated German scientist who lived from 1750 to 1817, and who is known as the Father of Mineralogy. Werner originated the method of describing minerals by their external characteristics, a method upon which the science rests today, and for his own use worked out an arrangement of colors and color names, illustrated by a set of actual specimens of minerals. This system was found so practical that many mineralogists adopted it, and applied to Werner for similar sets, which were known as "Werner's Suite of Colors." Among these mineralogists was Prof. Robert Jameson, one of the foremost scientists of his day, who based his own systematic classification upon Werner's teaching. At Jameson's suggestions, for the benefit of the other sciences and for easier reference, Werner's system was arranged in book form and the colors were copied from a Suite of the minerals, by Patrick Syme (a flower painter of Edinburgh and the official painter for the Wernerian and the Caledonian Horticultural Societies), the book being entitled "Werner's Nomenclature of Colours." The first edition (1814) was rapidly exhausted and a second was issued in 1821.

Werner, Jameson and Syme were highly gifted and trained scientists, with keen sense of color, and, as shown in their books, with an intense practical attitude toward their work. Syme's part was done with great skill. His colors, save perhaps in one or two cases only, have not altered, and his matches, as described, are found today by test to have been made from the actual objects mentioned. The book contains only 110 samples of colors, but, within its scope, is a fine work, and should be today the basis of color standardization. Why it is not, will appear later.

In 1892, Prof. William Hallock, of Columbia University, prepared the list of colors for the Standard Dictionary, as is explained on pages 5 and 6 herein, recording them in terms of the Maxwell disk system. This list contains some 388 colors, most of them textile and mixed-paint names of the period. The procedure was to gather as many examples of colors as possible under a certain name, analyze them with the wheel, and draw an average, which thus represented the average general usage. The work did not include any matching from actual natural objects, but presented only the commercial treatment of color names as exhibited in samples of textiles, paints, etc. It has no relation to Syme's book, and is not based upon it in any way. It is an invaluable record of colors which would otherwise, in many cases, be lost.

In 1905 appeared the French work, "Répertoire de Couleurs," published by the Société Française des Chrysanthémistes and René Oberthür, with the collaboration of others, principally of Henry Dauthenay. This work contained 365 plates, each having four tones of the color named, except Plate 1, Pure White, and 25 plates having each a single tone of metallic color, to show the golds, silvers, bronzes, etc. It thus contains actually 1,356 different colors, not counting the metallic inks or the white. The work was intended for horticulturists and includes on each plate references to matches of named varieties of plants under the various tones. Under each main color name is mentioned the source from which it was adopted; and the conditions under which the matches were made are carefully described. The names are given in French, English, German, Italian, Spanish, and Latin, with additional synonyms in many cases; the English, German, Italian, and Spanish names were supplied by native horticulturists. These names are in some cases horticultural names, originated for this work, but include also the usual traditional and pigment names, with some textile names. The matches were made against the actual objects mentioned, and by test are found to be quite accurate, except in two or three cases, instances so few, in fact, that they need not here be considered. The book records, also, matches for the colors in Saccardo, 1891, and many in Warhurst, 1890 (see Appendix D for titles), and for those in "A Chart of Correct Colours," by F. Schuyler Mathews (erroneously referred to in the French work as F. Schuyler), a supplement to "The American Florist," Chicago, 1891. Unfortunately, the Syme book seems to have been unknown to the authors. The Répertoire de Couleurs is a magnificent work, and would undoubtedly be in very general use today, were it not for the mysterious system upon which the colors are arranged. This of course, makes it somewhat inconvenient to use practically, so far as matching new colors is concerned, though, being thoroughly indexed, it is superb as a record.

In 1912 came Robert Ridgway's "Color Standards and Color Nomenclature." Dr. Ridgway was curator of the division of birds in the United States National Museum, and had published in 1886 "A Nomenclature of Colors for Naturalists," which contained 186 named colors. The 1912 work contained 1,113 named colors, arranged on an excellent system. Ridgway drew on the above mentioned works and a few others for his color names as explained on p. 11 of his book, but devised quite a few also. They are usually in couplet form. Ridgway's book is widely used by scientists.

In 1915 the Textile Color Card Association of the United States, Inc., was organized and began issuing its "Standard Color Card of America" and two Seasonal Cards a year, spring and fall. These cards are the accepted authority in the textile world, and are used as well in related industries.

Now, had Ridgway maintained the colors as he found them under the names he adopted from "Werner's Nomenclature of Colours" and the "Répertoire de Couleurs," and had the Textile Color Card Association accepted for its standards such of these as it likewise desired to use, while maintaining the many textile colors that were in earlier use as accurately recorded in the Standard Dictionary, the colors of commerce and science would have been in agreement, and there would in fact have existed today a single, universal, international standard of colors and color names. It is very unfortunate that these colors were not maintained.

A study of Ridgway's work discloses the names of pigments and paints, applied to specific colors most of which have, for hundreds of years, indicated primarily the substance, and only secondarily the color thereof. It is true that of late years, manufacturers have used coal-tar dyes to imitate the colors of all the earth, animal, and vegetable pigments, for cheap grades of artists' paints, and even for some of the more expensive ones; by this is not meant the legitimate use of synthetic coloring matters, but the mere imitation of the colors of the old paints by various dyes, under their old names. It is also true, however, that these names originally indicated either the character of the substance or the source from which it was derived. Thus *Sienna* was first called *Terra di Siena*, or *Sienna Earth*, because its special grade was first found near Siena, Italy. Later, in two forms, it was called *Raw Sienna*, and *Burnt Sienna*. These terms have no color significance in themselves, and it is only by experience that one knows the range of colors they possess. In addition, whether full strength or reduced with white, the names still apply. Many of the pigments, in full strength, are very dark, so that it is only when reduced with white that their characteristic colors become apparent. And further, in some cases the scale of reduction with white does not remain constant in hue, but shifts to one side or the other. Prussian Blue, for example, in full strength is so dark as to be practically a black; when slightly reduced, its deeper values are distinctly of a violet tone, but when further reduced, it passes over into greenish tones; the paler green-blue tones have as much right to be called Prussian Blue, as have the deeper violet-blues,—if the name is to be applied to the colors which the material produces. To so apply it, however, is to invite error and confusion, as must be the case with all such use of pigment names.

Nor did there lack prior comment on this point. In 1899 was published B. W. Warhurst's "A Color Dictionary, Specially Prepared for Stamp Collectors," London, a work which had a wide circulation, and which no writer on color can be without. On page 12, Warhurst discusses this point, and says: " . . . this mixing of pigment names with colour names is the most fruitful source of mistakes in colour nomenclature."

It was a fruitful source in this instance, for it led Ridgway on to the bestowal upon different, specific colors in his system, of synonymous names of the same, identical pigment. Thus he applied *Prussian Blue*, *Berlin Blue*, *Paris Blue*, and *Hortense Blue*, all of which are old and widely used names of a certain chemical substance, to different color sensations. Some books do attempt to draw distinctions, but they are usually books which are merely compilations, written for popular consumption, with no standing as technical authorities; and the distinctions—which vary with different writers—are purely imaginary. These names are in truth merely the trade-names which different manufacturers have used. Not only with Prussian Blue, but with most other pigments, the practise was rather common in former years, for concerns to label their goods with fancy names of their own invention, for sales purposes, and many dealers did not scruple to give the impression that the pigment was a new and different one, which was made by some secret process. In Germany, the names of the pigment Prussian Blue reached nearly to one hundred in number. In the course of time, the various names drifted about, and were used by dealers other than the original namer, so gaining currency and becoming recorded in the literature of the subject. Today, the practise mentioned no longer exists. Chemical knowledge and methods of business are now such that no manufacturer would consider branding a paint pigment as "new" unless it were actually true.

So, today, many of the old pigments have long been obsolete, and their names, in reality, are obsolete also; but a few linger on, and it would be well if they also could be entirely discarded. Their continued use is probably due to the fact that the manufacturers of paints for the amateur artist still list a host of colors under these names, differentiating them by slight admixtures of other coloring pigments in a somewhat meaningless manner. Most of these colors are, in fact, coal-tar products. This is not always a detriment, as the coal-tar colors of today are generally more permanent than many of the old pigments. If one wants the genuine article he can sometimes get it, by going to a reliable dealer, though the price is usually high.

Ridgway used few textile names. Not a few of his names, he adopted from the "Répertoire de Couleurs"; and some of these were original in that work, as may be observed by noting their peculiar forms. But frequently Ridgway applied them to colors different from the originals, a practice, one may suppose, due to the fact that the original colors did not appear in Ridgway's system. It would certainly have been preferable to devise entirely new names; established as these would thus have been, the nomenclature of color would have been greatly enriched, and there would have existed a more effective apparatus for the precise naming of colors of subtle differences, instead of a discrepancy between two important authorities.

There crept into Ridgway's work also a few names of very general scope, which cannot properly be applied to specific color sensations. These include the names of single dye-stuffs, groups of dyes, and brand names. Dyes, of course, according to control of the dyeing-process, produce many different tones or values of color, from light to dark; likewise, by change of the mordant, some of them produce colors of quite different hues. The names of dye-stuffs are essentially labels for chemicals,—not for the colors they produce. The application of the names of groups of dyes—like *aniline* and *anthracene*—to specific color sensations, is utterly absurd, since each group contains many dyes of all sorts of hues. Regarding brand names, it is sufficient to note, as an example, *Benzo Brown*, a name thus appearing in Ridgway; *Benzo* is a coined word, the property of a certain manufacturer, the name of a brand which includes nearly two hundred products, among which are no less than eighteen different *Benzo Browns!*

A list of such names used by Ridgway follows, in order that any inadvertant use of them may be avoided; and also in illustration of the character of such names, so that a similar practise may not in future be adopted by other namers of colors. *Dye names:* Acetin, Benzol, Dauphin, Helvetia, Mauve, Neropalin, Patent (a trade-name applied to fifteen different blue dyes), Haematoxylin (the name of the organic matter to which the coloring property of logwood is due), Picric, Rosolane, Urania, and Xanthine. *Group names:* Aniline, Anthracene, Eosine, Ethyl, Methyl, Napthalene, Nigrosine, Nopal, Phenyl, Rhodamine, Rocellin, *Brand names:* Benzo, Columbia, Diamine, Diamine-Azo, Hessian.

From the present work, the chemical, dye, and brand names, as employed by Ridgway, are excluded. They are not names of colors, and it is obvious that no authority can make them so, not even if supported by the acceptance in general of the scientific world.

The names of the pigments are, however, included. The trade-names of dyestuffs have no interest for the ordinary individual, and are, in fact, quite unknown to him. The names of the pigments and paints, on the contrary, while they were originally technical names which concerned only the artist, long ago entered the colloquial language. Some of them became obsolete, others are rather infrequently used and not widely known. But many of them have become fixtures in the ordinary color vocabulary. Though they are in reality names of materials, they are used to a certain extent to indicate color sensations; but this is almost always done with simply an indefinite or approximate purpose, and not, as in Ridgway, with the intention of naming exact, specific color sensations.

It was only after much thought and study, that the decision was made to include them in the present work. In doing so, the strongest emphasis is laid upon the statement that *these pigment names are not, in the slightest way, intended to name or designate the colors of the particular squares by which they are herein recorded.* Such squares are, of course, only single degrees of the many which each pigment or paint is capable of producing, and in matching them herein, an arbitrary choice has been made as to whether or not they should be reduced with white, so as better to show their characteristic hues. *In addition, it is urgently to be desired, and herein is earnestly recommended, that these names of pigments never be used as names for specific color sensations.*

Because of the importance of Ridgway's work and the wide use it has attained in the sciences, the standard colors established by him have mostly been maintained in this Dictionary. An exception has been made in the case of a small percentage of names. All such cases have been explained in the Notes, where Ridgway's colors are, however, recorded.

The Textile Color Card Association has shown an admirable ability in the invention of names for specific colors. Many of these names, probably the majority of them, could well be taken over into the general vocabulary of color, and quite a few of them in fact already have been. A small number are somewhat ludicrous, but in that respect they merely exemplify a phenomenon which has existed, not only in the creation of names for *modish* colors, but in the creation of *The Mode* itself, and not more in costume, than in manners, in clichés of speech, and in every other form of human culture. In reading the history of civilization, indeed, one wonders whether to laugh or to cry. But the history of costume, at any rate, provides one of the most humorous pieces of literature ever published. The following is worth quoting from Challamel's "History of Fashion in France":

> A great sensation was caused at the opera one night by the arrival of a lady dressed as follows. Her gown was "a stifled sigh," trimmed with "superfluous regrets," with a bow at the waist of "perfect innocence," ribbons of "marked attention," and shoes of "the queen's hair" embroidered in diamonds, with the "*venez-y-voir*" in emeralds. Her hair was curled in "sustained sentiments," a cap of "assured conquest" trimmed with waving feathers and ribbons of "sunken eye," a "cat" or palatine of swansdown on her shoulders, of a colour called "newly arrived people" (*parvenus*), a "Médicis" arranged "as befitting," a "despair" in opals, and a muff of "momentary agitation."

Some of these are delicious. "A stifled sigh," "superfluous regrets," and "momentary agitation" are really inspirations, and the world would be the poorer without them. Fanciful and nonsensical such terms may be, as Ridgway called them; yet, on the other hand, what profound significance they have for one who looks below the surface, and how exactly do they reflect the thought and conditions of their time. Of all subjects, the study of words is the most interesting. By the information contained in their primitive roots, as determined by the methods of comparative philology, the state of civilization of prehistoric peoples has been reconstructed, when all else has perished. And among the various groups into which words may be divided, that which concerns colors is not the least valuable. Some of its members are ludicrous, to be sure, but they are not the less instructive for that reason.

But this is not to say that any special *effort* should be made to devise ludicrous color names. Dame Fashion will always see to it that a sufficient number of such terms are invented! Certainly they add to the gaiety of nations; and it is not necessary to include them in the exact, scientific, nomenclature of serious color recording.

It may be noted that the Textile Color Card Association unfortunately bestowed certain names as recorded in the Standard Dictionary, upon a few colors which differed from those employed at an earlier time. In such cases, both colors are recorded herein, in order to show, as a matter of historical interest, the difference between the current color and the original color in use prior to 1892.

While we have expressed admiration for the ability shown in the invention of these new names, it is evident that this invention has, at times, languished and failed, for there are some twenty cases where use has been made of names both with and without generic terms attached, for colors of the same character. For example, there is *Glacier* and *Glacier Blue,* both dark blue-greens, hardly distinguishable. Where such pairs of names are used for colors so similar to one another, there is grave danger of confusion and possible error. It is not a case, as may be thought, of the re-issue of a color, with the inadvertent omission or attachment of the generic term; for the differences are sometimes sufficiently wide to show that this is not the case, and in addition, both names appear, separately, in the Index published by the organization.

Investigation has occasionally disclosed different colors to which have been applied English and French words of similar meaning. As an example, two slightly different blues were encountered in the Spring 1928 Supplement Card, one called *Old Blue* and the other *Bleu Passé.* But *Bleu Passé,* in French, is exactly *Old Blue;* there is no other term which could or would be used.

So with other synonymous names. As an example of interest, the name *Pansy* is encountered in the Standard Card and also in several Seasonal Cards. In the Spring Cards of 1920 and 1927, the name *Heartsease* has been employed to designate a color differing slightly from the one called *Pansy.* Careful investigation would seem to indicate that these two terms have, for over two hundred years, been used to identify the same color. The word *heartsease,* as all know, is a very old and commonly used name for the pansy.

It would be well here to define the term synonym or synonymous, as used in this book. In the usual sense, synonymous terms are those which are nearly similar, but which do have subtly differing shades of meaning. The expression is also applied to those terms or words which are exactly alike in meaning. It is in this latter sense that the words are used in this Dictionary Such synonymous pairs as Berlin Blue and Prussian Blue, Heartsease and Pansy, are absolutely identical in meaning. In such pairs, either term may be used in place of the other, without change of meaning, even of the minutest degree.

It should be kept strictly in mind that we are dealing here only with words. *Berlin Blue* and *Prussian Blue* are examples of words used as names for a certain chemical substance. The substitution of *Berlin* for *Prussian* does not cause an automatic change of color in that substance. *Heartsease* and *Pansy* are examples of words used as names for a certain color sensation. That color sensation is one seen in the flowers of the pansy plant, and by attributive use, the name of the plant was attached also to the color sensation itself. During the past century, horticultural science has developed pansies of many different colors, but for two centuries the color term Pansy, or Heartsease, has named unchangingly the primitive color of the pansy flower, which is a deep violet.

In the Fall 1926 Card, the experiment was tried of issuing eight sets of ensemble colors of three tones each; called 1, 2, and 3, under the general title of

"Fairy Tales," the names being: Mother Goose, Sleeping Beauty, Peter Pan, Aladdin, Brier Rose, Cinderella, Ali Baba, and Bluebeard. As these cannot be considered strictly color names, they have not been included in this Dictionary.

In the paint industry in America, no standardization of color names has been undertaken, and in consequence the widest diversity of practise exists, as was formerly the case in the textile industry. In England, The British Engineering Standards Association has been engaged in standardizing a certain number of colors for the industry there. This association represents various interests, such as government departments, and scientific and trade associations, organized as committees or panels for different industries. A subpanel of the Panel on Ready-Mixed Paints was appointed to deal with the matter of color standardization. Already about sixty names which represent average usage as determined by a committee of eminent experts, have been standardized. With the exception of a few of these, it has been found that these standards agree accurately with the averages drawn from much wider limits for this Dictionary. The standards established by the British Engineering Standards Association are therefore maintained. They are nearly all discussed in the Notes. As a matter of fact, it will be found that, as they represent accurate averages of customary usage, quite a few American manufacturers also match them, and many come quite close. There is no reason, therefore, why all should not conform, so that the purchaser, who is the one to be considered, may be assured of getting always and everywhere practically the same color, under any given name.

There is urgent need in the paint industry of an organization similar to the Textile Color Card Association.

Through such an organization the cards of manufacturers might be considerably simplified, and the many artists' colors materially reduced in number. As it is, artists' colors run from one to two hundred, and from two to three times that many among certain European manufacturers. The skilled artist of course avoids most of them. He realizes that the majority are colors resulting from mixtures, colors which he himself can easily mix to better advantage on his own palette. So, not infrequently, many of these paints rest on the shelves until they are hardened and worthless. Some manufacturers believe it advisable to continue issuing paints under the names of all the old pigments of a bygone era. Such paints, with the exception of a few made with mineral pigments, are frequently today made with coal-tar pigments, and the colors, varying widely with different makers for any given name, are usually quite unlike the colors of the original pigments. But the makers control the situation. If they stopped using the names, any demand would, perforce, vanish. A little educational literature, put out as part of their advertising matter, would then be of immense benefit in the advance of the art of color and towards standardization therein. Most of those old pigments were fugitive, some of them were actively damaging to any picture in which they were used. Few, if any, of the pictures on exhibition, publicly or privately, of the earlier masters, remain unrestored, and practically the entire output of some of the greatest painters is now nearing complete ruin. The coal-tar colors of fifty years ago were, most of them, fugitive. But the advance in knowledge of the past fifty years is the greatest phenomenon in all history; and among the wonderful things we have today, the modern coal-tar substances are not the least important. Modern pigments are certainly worthy of new names.

A list of one hundred differently named paints might by the layman be considered helpful, but two dozen are sufficient to cover the entire spectrum range, including the purples, starting from the fullest brilliancy. In fact, many of the greatest colorists have used only half that number, and less. What marvels can be produced with only *five* colors, Red, Yellow, Blue, Black, and White (the white of the paper), is constantly before the eyes of the world in the magnificent color reproductions in our magazines, calendars, and illustrations, printed by the so-called four-color photo-engraving process. Even the Black is sometimes eliminated, as in the three-color process. This is not to say, however, that five colors should be used. Extremes in any direction are blameworthy, and it would be folly to use five colors when a dozen would make the work much easier, irrespective of the fact that with pigments the intermediate mixed hues could not be obtained with sufficient purity.

It might be mentioned at this point, that, at various times, suggestions have been made that color standards could be established by series of mixtures of Red, Yellow, and Blue, in various recorded proportions. (Actual mixtures of *pigments* are here referred to, and not optical instruments based on mixture principles, where the "mixture" is of a different nature.) Such suggestions are based upon incomplete knowledge of three-color theory, and are made by those not practically experienced in color mixing. The known impossibility of obtaining bright intermediate hues by mixture is sometimes intentionally kept out of sight by the statement that it is the duller colors for which such three-color standardizations are being suggested. Permitting that to pass, the suggestion that anyone should put himself to the difficulty and labor of trying to match, say, a Burnt Sienna tone, with three colors, when Burnt Sienna itself is as easily obtainable, is utterly fantastic. Color matching with mixtures of Red, Yellow, and Blue, is always difficult. The beautiful pictures in the magazines, printed by the four-color photo-engraving process, even begun as they are by the mechanical work of photography, require in re-etching a very high degree of skill. In the three-color process, the skill required is much greater still, which is the reason why the four-color process is so much more in use.

There is another and very important factor involved in three- and four-color printing, which is largely unknown. The ink is deposited by the printing plate in minute dots of color, or (in deeper tones) with minute intervals where the dots of ink are omitted. In combination, the colored inks are in places superimposed, so that there is simple *pigment mixture.* But in other places, the colored dots are side by side, so that there is *light mixture.* In addition, the film of ink deposited is exceedingly thin and transparent, so that there is a high degree of transmission of light by reflection from the white of the paper. In consequence, a greater purity of intermediate mixed hues is possible than can be obtained with the relatively thick and opaque films of paint laid on with brush or air-gun.

Another element in these long lists of paints is the use by manufacturers of the synonymous names of a single pigment for different colors. A single example will suffice. The beautiful green pigment, ordinarily called Transparent Oxide of Chromium, was given also the names Emerald Oxide of Chromium, Emeraude, French Veronese Green, and Viridian. This substance is a relatively modern pigment, its history, and the history of its various names being well known. Yet it is a common practise for a maker to place three or four different greens on the market under these various names, a meaningless and confusing practice.

Generally speaking the artist is interested only in the colors of his pigments, not their names, except insofar as they indicate if truthfully used, the chemical substances, by which he might be guided in the choice of permanent pigments. If truthfully used, he will avoid certain names at any cost, as known to indicate substances that are fugitive, or actively damaging to the picture. An example is *King's Yellow,* a name which can only be correctly applied to *yellow orpiment,* a pigment coming down from ancient days, but completely out of use for a long time. *King's Yellow* today is usually merely *Chrome Yellow,* but what then is the purpose in calling it "King's Yellow"? Why disguise Chrome Yellow under a false name? There is no magic in the *name* "King's Yellow" by virtue of which a user of it becomes a master painter.

The names of old pigments should be allowed to stand as symbols and reference-marks of their special periods. The artists of earlier centuries used what pigments they had, most of them coming down from antiquity. Sometimes a name used came down also from antiquity, but it was applied to the genuine, original pigment, not to a substitute. Such a name was that of yellow orpiment, called by the Greeks *arsenikon,* whence our *arsenic,* and by the Romans *auripigmentum,* which dwindled in medieval times into the word *orpiment,* or *orpin.* When new names were applied, as was the name "King's Yellow" to orpiment, they were really new; and they were used merely as alternates, along with the older name, the substance in question never being a substitute.

No artist today, if he had the required knowledge of his craft, would use some of the pigments of an earlier day, any more than he would use the brushes, the technique, the style, or the pictorial content. No one would think of using the language of an earlier day; no one, if he wanted to be understood, would today call the practise of painting in water-colors, *limning.* So with the names of the old pigments. They are significant terms of the periods in question. They would be full of historical interest, were they not ruthlessly torn from their real meanings.

Thus runs the brief history of color standardization, a sad story, in spite of the emphasis laid upon the need for standardization, and the protestations of endeavor toward that end. Chronologically, the various authorities were all separated, and hence, each could so easily have recognized and maintained the standards of the prior works.

One may expect an immediate question concerning the variation of color exhibited in nature by objects of the same kind and the consequent inability of the name of such an object to refer always to the same unchanging color. That is quite true within certain limits, but as an argument it actually has less to do with the subject under discussion than one might be led to suppose. Certainly, there are such color terms as *Jade Green, Shell Pink,* and *Wine,* the objects named embracing so wide a variety of colors, that their names have no significance whatever, and by the same token, such terms should never have been used as color names. The fact that they have been does not remove their utter unsuitability, nor the impossibility that they can ever be standardized by any authority, however powerful may be its backing. All that is well known.

But such names as these are very few in number. There is, however, a large class of names drawn directly from material objects, where the situation is quite different. These names refer to objects, the colors of which differ only to a small amount as between various specimens, and in some cases even, exhibit no perceptible difference at all. Some of these names were used in Syme and in the "Répertoire de Couleurs," and, as anyone may prove for himself, were accurately matched therein to the objects named. The French work is a modern one which should be of interest to any whose work involves the naming of colors. With such names, even if one did not go to the "Répertoire de Couleurs," but went instead to the actual objects themselves, the colors selected should appear very close, and frequently identical, to those therein. Within the small range of color variation which any such object named may show, the incontestable fact remains that no one's choice is any better than another's. It must be apparent that if real color standardization is ultimately to be achieved, an earnest attempt should be made to adhere to all earlier standards that fall within this small range of permissible color variation just mentioned. In many cases however, where earlier standards have been ignored, it is a fact that the *new* colors do not remain within the small legitimate range of variation but are placed outside it. An examination of collections of samples of colors under various names found on the market presents quite conclusive evidence in this connection. These samples frequently demonstrate a radical departure in color from the color possessed by the object in question.

In connection with color, it is interesting to note that many people believe colors can be matched from memory alone. Experience has demonstrated to the authors that this fond belief enjoyed by many is not true.

With the other senses, analagous powers do exist. In hearing, there is the faculty of *absolute pitch* which some musicians possess, by which they can name any sound heard, or sing any tone written, within of course, the compass of their voices. Outside that range, they can appreciate any tone in their minds, and those most highly gifted, as in the case of the master musicians, can read the fully orchestrated score of a symphony and hear the exact sounds in their minds, or conversely, write down a fully orchestrated chord on hearing it. In the field of professional tasting, tea and wine experts have been known to take a single sip, and give the complete history of the sample. Experts of another kind sniff a strange perfume, and name correctly a half-dozen ingredients.

But color is a totally different matter. Color has no objective existence. It is solely a psychological phenomenon, in which certain functions of light are affected by inherent plus momentary conditions of the retina of the eye for interpretation by the brain. The colors of objects may be completely altered by a variation of the light in which they are observed, and in the absence of light, all colors disappear—which is not the case with sound, taste, smell, or feeling. And no one in the world can explain what color is to those who are color blind.

Colors are altered to an amazing degree, in hue, purity, and value, both singly and in various combinations, by the simple presence alongside them of other colors. They are altered likewise by the reflected colors of their surroundings. They are altered by the character of the light in which they are observed, and according to the time of day. They are altered by the condition of rest or fatigue of the eye to any color, the presence of after-image on the retina. And all these again operate in various combinations. Time and time again, the factors which alter colors have been explained in popular books on the subject; so that, they may in truth be looked upon as matters of general information, certainly well known to those interested even in the slightest in color. They are facts that may be tested by anyone willing to give five minutes time to it. Yet there are people who claim that they can match or name colors, to exactness, by recollection alone.

In the scientific world, and in the textile world, there is talk of the "color standardization" that has been accomplished. That idea, nevertheless, has missed completely the one, all-important fact involved; and that is, that no single field has any special right to colors and color names, that the house painter, the decorator, the horticulturist, to mention a few, have just as much right to use colors and color names, as have the textile merchant and the ornithologist; and have just as much right to pass judgment, favorable or otherwise, on any color standard, as have its devisers. The phrase, "color standardization," has little meaning unless the standardization is one which represents uniform practice in all the industries and all the sciences.

It is needless to rehearse here the statement of the disability in exact color reference which separate and different sets of standards have brought about. It is as needless to dwell upon the desirability of a single, universal standard of colors and color nomenclature. These things are known to all, and have been discussed time after time. The situation exists. The question now is, merely: Can anything be done about it? The answer may be found in the single word: Compromise.

The question is present only in such cases where different authorities present different colors under the same name. Where a color name is unique with a certain authority, it is standard (except in certain cases, where the choice has been, for some mysterious reason, so unwise, that the world cannot accept it). But where different authorities present different colors under the same name, the world will be divided in its adherence, since personal interests must of necessity dictate the choice of authority, for any individual. Since no one authority has any higher standing than another, there is no possibility that the standard of any one could ever become universally accepted under past conditions. But where all individual standards are, so to speak, combined as in this Dictionary, a common meeting-ground is established upon which it may be possible to reach a mutual understanding, and perhaps an agreement. Where possible changes in individual standards are found necessary, this Dictionary serves as a medium for discriminating operation.

There is one objection to changes, which may legitimately be offered, and which should be carefully considered. That is, that changes would interfere with the recorded systematic classification of various sciences. In reply to this, it may be said that this possibility has been foreseen and investigated. It has been found that not all of the color names presented in Ridgway's system, for instance, have been used in such classification, and among these are nearly all the names for which a change is desirable. The interference, therefore, so far as concerns actual practise up to date, would be negligible. But apart from this, the fact of course is, that science ever advances. Classification is not something that can be done once and for all. A large part of the publications of scientific institutions, for the biological sciences, is taken up with revisions of classification. In all branches of biology, revision is constant, and only the latest publications are usually of value. Advance of knowledge and revision of its record is gradual, but compared by separate periods, its change of terminology, no less than its other characteristics, is striking. The classification of the day of Werner, Jameson and Syme, which made use of Werner's nomenclature, is obsolete. So is that of the period of Ridgway's first edition, 1886. So, in time, will be that of today. Even the names of species in the biological sciences are subjected to change: many of the names established by Linnæus himself are no longer in use. But no scientist would say that such changes have not been brought about by the necessity for improvement in classification, or that they cause any difficulty today in the identification of species.

It should be kept foremost in mind, in considering this matter of changes, that Ridgway's book does not thereby automatically vanish, any more than did Syme's. It remains in existence, just as do the books containing the record of the systematic classification of the period for which it furnished the color nomenclature. In checking any color reference in scientific literature of the early nineteenth century, no one would think of going to Ridgway for illustration; he would turn to Syme. So, for the early twentieth century, the proper source of reference is Ridgway. For future periods, new sources of reference will always be made available, and will be used. But they will be used only in the future. No one can go back with them into the past.

It is thus obvious that if a universal standard of colors and color nomenclature is to be attained, only one possibility exists by which it may arrive. That is, by cooperation, by a willingness in all fields to compromise. The word compromise should not be misunderstood. It does not here mean to agree to changes merely in order to arrive at a compromise between equally valid conflicting claims, since in no case does such a condition obtain. It means that each field agrees to make some changes; and the fact is, that in nearly all cases such changes will be simply the correction of mistakes which should never have been made, and which should not continue even if cooperation cannot be arrived at, and a universal color standard is forfeited. The benefits, however, of a universal standard that would immediately be felt by science, by industry, and by the world at large would be incommensurable. And for its consummation, it needs but one thing—consent, as manifested in practise.

EXPLANATION OF THE INDEX OF COLOR NAMES

The names in the Index are referred to their colors by the familiar method of plate, column, and row.

Only names in current use appear on the Plates. All obsolete and infrequently used names are given only in the Index. Combination terms, whether joined, as *Bluebird*, or separated, as *Blue Aster*, appear in their alphabetic place in the Index. A single exception is made in the case of combination terms with the word *Rose*, where for the sake of clearness, all the separated forms are given first, then the joined forms.

The word "color" may sometimes be ambiguous, meaning either color as an abstract quality, as when we speak of the "blue" sky, or of a "blue" textile; or color as an actual substance, as a pigment or dye. Throughout this Dictionary, in all cases where there might be a danger of such confusion of meaning, and in a few cases for the sake of emphasis, the technical term *color sensation* is used in referring to abstract color. Where there is no likelihood of confusion, the simple term *color* is used.

Abbreviations.—The following abbreviations are used in the Index and on the color plates. No period is used after the abbreviations.

Bk	Black	Lt	Light
Bl	Blue	Dk	Dark
Br	Brown	Md	Medium or Middle

Gr	Green
Gy	Grey
O	Orange
Pk	Pink
Pr	Purple
R	Red
Ult	Ultramarine
Ver	Vermilion
V	Violet
Y	Yellow

Art	Artificial
Bt	Burnt
Im	Imitation
Tr	Transparent
Am	American
Eng	English
Eur	European
Fr	French
It	Italian
Ln	Latin
Sp	Spanish

Superior Letters, after color names, indicate that (1) the name is in use only by a certain industry, or practically so; (2) the color is derived from an animal or vegetable source and not from a mineral; this refers especially to the early dyes and pigments; (3) the color name, so far as is known, appears only in the particular book referred to. These books in the following list are three in number, identified with the letters F, R, and O.

The list of superior letters is as follows:

A	A dye or pigment from an animal source.
B	The name of a British ready-mixed paint.
C	The name of a color used in ceramics or adopted by other industries from that source.
F	Funk & Wagnalls' New Standard Dictionary.
H	A color used only or originally in heraldry.
M	The name of an American ready-mixed paint.
O	Oberthür and Dauthenay's "Répertoire de Couleurs," 1905.
P	The name of a pigment or paint used by artists and structural painters.
R	Ridgway's "Color Standards and Color Nomenclature."
T	A color name used only in the textile industry.
V	A dye or pigment from a vegetable source.

The color names in the book designated in the above as F were not originated for that book, but were gathered from earlier sources, the dates of which in some cases are not yet known. The date 1905 before a color name with a superior R after it indicates that the name originally was used in O and was adopted by R.

It should be noted that the *absence of a superior letter* after a color name indicates that the name is in general use and is usually quoted by all authorities. These are mainly the old traditional names.

Classes of Color Names.—Color names are either current or obsolete. A name in *capitals* indicates that it is in constant daily and yearly use, that it is part of the ordinary vocabulary of color, and is not a seasonal or ephemeral term. This includes a number of new names recently admitted to this classification by the Textile Color Card Association. A name in *lower case* indicates that it is in daily and yearly use, but rather infrequently, not constantly. This class includes many old names which are still current, though seldom used, and also those seasonal or modish, fancy names, which have not yet become obsolete; also names used by one or a few manufacturers, or listed by a few authorities, but which cannot be considered in general use. A name in *italics* indicates that it is obsolete. It may, however, come into use again; many names obsolete for long periods have recently become alive. Sometimes the name has been applied again to the same color, sometimes it has been applied to a different color; in the latter case, both are shown. As a possible source of confusion exists here, the period or date should be kept carefully in mind in any reading or reference concerning such names.

Names in Brackets.—Many color names are composed of two words, a *specific* term and a *generic* term. The words Blue, Brown, Green, Grey, Orange, Pink, Purple, Red, Rose, Violet, and Yellow (and a few others which are showing a tendency to become generic), are thoroughly generic in character. Each embraces a very large number of colors of various degrees of hue, purity, and value, and it is obvious that the name cannot indicate alone any one in particular, that all in that group have just as much right to be called by it. Specific names are therefore necessary to indicate specific degrees of such generic colors; for example, *Canary Yellow.* Sometimes, the specific portion is used alone, as, *Canary;* sometimes, the two portions are used, as, *Canary Yellow.* In such cases, in the Index the generic portion is placed in brackets. The tendency in the textile field is to omit generic terms; in all other fields, to use them.

Names in Parentheses.—These are used for several purposes, and are all self-explanatory. A few names in an old and probably unfamiliar spelling are given their modern spelling in parentheses: as, Claver (Clover). Where a modern color name is the same as an old one, but differs as to the color represented, as is the case with a number of names appearing in the list in the Standard Dictionary, the Plate reference to the early color is given in parentheses. Translations of foreign terms are placed in parentheses, as they are frequently unknown to English users; for instance, Reseda (*Fr* Mignonette). The name of the language is abbreviated in italics, as *Fr* for French. Names which are synonymous to a name in more general use have the main name given in parentheses.

Synonymous Names.—Certain colors, both as pigments and as color sensations, have been given more than one name, and in some cases quite a few names. In such instances, all the synonymous names follow the main name, but are *indented.* The main name, or that most generally in use, has not been the same at all periods. The one given is the usual name of the group at the present time. In some cases, a whole group has become obsolete, and only a single name survived as current. *This applies, of course, only to English usage.* In other languages, some of the older names are still current, and hold the place of the main name. In other languages, also, names which are synonymous in English with a certain main name are synonyms with quite a few other names. Special note should be taken of the fact that in the past, color names of pigments have been used with apparent carelessness and indifference. The result is that there is hardly a name which has not been applied to many other pigments, and the literature of the subject, even with the most authoritative of technical works, literally teems with conflicting applications of names. To find a path through this tangled mass of conflicting names has required years of toilsome labor, the searching through innumerable books in many languages, back to the very first writings on colors, and the making of many chemical investigations and dyeing tests, in the endeavor to eliminate the errors and determine the correct usage. The reservation must always be made by the reader that the synonyms as listed herein will in many cases differ variously from the usage in other books, as such books differ among themselves. A synonym as applied herein may not always represent the color which an earlier writer had in mind, and a careful study of his usage must be made in any case. *The synonyms given herein, however, are the result of long and intensive study, and are the original and correct ones, so far as the authors have been able to determine.*

Interpolations.—Appended to some names in the Index and on the Plates will be found either a *plus* or a *minus* sign. It was discovered that certain samples of textiles, paints, etc., were just perceptibly lighter or darker than the color in the Dictionary. For critically exact matching, therefore, interpolation had to be resorted to. A *plus* after a name means that the sample being compared was slightly darker than the recorded square. A *minus* sign means that the sample was slightly lighter. (Logically, these signs should be placed after the plate reference, but for the sake of clearness in the Index, they have been placed after the name. In the Notes, the signs do appear after plate references.) It should be remembered that the shadow of a finger, several inches away, is sufficient to cause a darkening of a color to a perceptible extent. In one or two cases, a double plus sign has been used to indicate rather more than "just perceptible" darkening.

The Matching of Samples.—For a description of methods, see the section on Color Matching, pages 11, 21, and 13. It is repeated here that even a very slight change of angle with certain materials alters their apparent color. This is especially so with silk samples, where the gloss, the degree of penetration of light, and the minute shadows in the texture of the woven goods, which alter according to direction, all have their effect on the color; and to these may be added, in some cases, the much more disturbing change due to the dichroic property of certain dyes. In addition to silk samples, the same change was found with the colors in Ridgway, and the Maxwell color disks by which the colors in the Standard Dictionary were matched, although both of these had the so-called flat surface. The changes are caused in these cases by the unevenness of the surface, which is due both to the paper underneath, which the layers of pigment naturally follow, and the differences in particle size of the pigments themselves. This unevenness can be seen by the unaided eye, but a magnifying glass will make it very apparent. The color disks showed more of this change than the Ridgway samples. When making comparisons, great care is needed to keep the line of observation at right angles to the surface of the sample, and the surface itself so placed in relation to the source of light as to reduce as much as possible any minute shadows that would affect the appearance of the colored surface, at the same time so viewing the surface as to prevent the light source from being mirrored in it. Samples of cottons, woolens, felts, papers, etc. cause little or no trouble. Neither do glossy paint samples, ceramics, and metals, provided the comparison is made at right angles to the surface under the clear light of a north sky. It is necessary in these cases to prevent reflections of lights or differently colored surfaces from being mirrored in the gloss of the sample.

Color as Affected by Surroundings.—In cities, it is very difficult to make critically exact matches, except under favorable conditions which are not too frequent. Buildings nearby, which in these days take on all sorts of colors, throw into rooms disturbing reflections that have no small effect on the colored samples which one is trying to judge. Colors of two or more materials which in one location present to the eye the same dominant color and exactly match, frequently possess differences of reflection according to wave-length, and in another location do not match at all. The utmost care is therefore needed in the consideration of surroundings. There are many places in cities where exact matching is not only difficult but is absolutely impossible. In such cases, an artificial light having the characteristics of northern skylight must be used. In the matching for this Dictionary, a clear, unobstructed northern skylight was used, and the lower portion of the windows was blocked off to the level of the eye, to avoid reflections from the ground.

Again, in cities, interior walls are usually of some warm color, yellowish tones being frequent, and the difference of color which a sample of goods will take on when observed close to a window, and when in the middle of a room with such walls, is sometimes astonishing. Even the color of the clothing worn by the individual making a comparison may, unless care is taken, influence the accuracy of the matching to a considerable extent, especially when matching silk samples, and to some degree, flat colors.

The Pigment and Dye Colors Recorded Herein.—It is repeated here that the colors of pigments recorded in this Dictionary are representative averages only. In determining on these, the best grades manufactured in the United States, England, Holland, France, and Germany, have been compared. Full depth tones are usually recorded, but where full depth is very dark, tones with slight reduction by white. (See pages 7, 136, 137.)

Many dyes, especially those of earlier days from natural organic sources, are capable of producing colors of different hues by change of mordants (as well as changes of value by other control of the dyeing process). The old dyes are practically all obsolete, except for a highly restricted and very limited use of a very few, as occasionally in food-stuffs. Because many of their names appear so often, however, not only in the older technical treatises, but in general literature as well, it has been thought necessary that they should appear in this Dictionary, which aims to be as complete a general reference source as possible. To record all the hues which each is capable of producing by the various mordants would be impractical. Generally the natural dyes were used with only one of the mordants available, as best adapted to the circumstances, and it is that color which was customarily intended when the dye was casually referred to. An effort has been made to determine such usage, and the colors recorded were matched after study and comparison of old pattern books.

Current Names of Mixed Paints.—It has been thought inadvisable to record herein names of a special sort used by individual manufacturers, because of possible copyright restrictions. However, names of that sort, which have been kept in use by their originators for twenty years or more, have been included, because that is a practise which deserves recognition and praise. The authors would be glad to receive color-cards from manufacturers, together with any possible information regarding the years of first usage on their special color names, and will be glad to include any such names in future editions of the Dictionary of Color.

Dates.—To the left of color names in the Index will be found a date. This indicates the year in which that color name was first used, in the English language. Many names were taken into English from other languages, where they were in use long before, but the date given applied only to their adoption as *English color terms.* Also, some substances were used in the ancient practice of medicine, under the same names, long before they were used as pigments, and we are not concerned with such use; the date given is that of their first use as pigments. In early references, care must be taken not to confuse such use as medical substances with pigmentary use.

The dates given are the earliest, so far as has been determined, which appear on the records. In many cases, the exact year could be given. In others, however, only the decade could be determined, and in some, only the century. It is known, of course, that a color name was often in use in the spoken language long before it appears on the record. Just when it appeared in the spoken language naturally could not be determined. We have only the records to refer to. In the case of the Standard Dictionary list, many names were gathered which had been in use during the previous decade or two, and which were new then. Such names doubtless are recorded in the year of their first use in the fashion periodicals of the time, but have so far not been traced. Any name, therefore, dated 1892 may be accepted as having been originated a few years previous. Furthermore, many of the old pigmentary colors were in use, as pigments, long before the names listed were bestowed on them. It should always be remembered that the dates refer only to the *names*, and not to the substances themselves. Thus "ochre" as a *pigment* was in use by prehistoric man, as the cave-paintings in Europe show; the *word* "ochros" appears in the writings of Homer, ninth century B. C.; but "ochre," as an *English color term*, first appears in the fourteenth century A. D.

In some cases, no date is given. This means that, so far, no record could be found, although in many instances, it is well known that the name is an old one. More search should establish dates for these, as well as earlier dates than some of those given. Any information on this subject will be very greatly appreciated, as will any information on names not included herein. Needless to say, the utmost care was taken in securing and preparing this material for presentation. It has been the authors' earnest desire to prevent any inaccuracies from becoming a part of this material. Errors, however, do occasionally occur, and therefore any corrections brought to the attention of the authors would also be appreciated. Information on old textile names is especially desired. In all cases, exact references and exact quotations would, of course, be of greatest value. Named samples—and especially old color-cards—both of textiles and paints, which individuals or concerns might be willing to donate in this cause, would be indeed welcome.

Spelling.—The New English Dictionary gives a very convenient classification of the English language by centuries, which indicates the state of the language by such periods. This classification is as follows:

To the eleventh century	Old English, or Anglo-Saxon
Twelfth century	Old English Transition (Semi Saxon)
Thirteenth century	Early Middle English
Fourteenth century	Late Middle English
Fifteenth century	Middle English Transition
Sixteenth century	Early Modern, or Tudor English
Seventeenth century	Middle Modern English
Eighteenth and nineteenth centuries	Current English

The standardized spelling of today is comparatively recent. In the earlier stages of the language there was no standard, and people spelled according to their own ideas. In consequence, the color names of the early dates appear in the most diverse forms, some almost unrecognizable. To include all such variant spellings would extend the Index enormously; they may be found in the New English Dictionary. The spellings given herein are those of today, except in a very few cases, where for historical interest, variant spellings are also given; and there are a few cases of color names which became obsolete in the early centuries, and hence still retain their old forms. For the spelling of all names of flowers, trees, fruits, etc. the forms in "Standardized Plant Names," issued by the American Joint Committee on Horticultural Nomenclature, are followed. For all other words, the Standard Dictionary has been followed.

Notes on Color Names.—Alongside many color names in the Index will be found the reference sign †. This indicates that the name in question is discussed in the Notes, which are arranged alphabetically. Such names should always be looked up in the Notes, before any use of them is made. In the case of the bestowal of the same name upon different colors by various authorities, the variant usage is recorded, and analyzed, for the purpose of arriving at a standardization of one single color; and where necessary, a brief history of the names and variant usage is given. Other points in regard to various names are discussed, and in general, any question concerning any color name will be found answered in the Notes.

NOTES ON COLOR NAMES

The names in the Index are referred to the Notes by the mark †.

The following abbreviations are used in the Notes:

R	Ridgway's "Color Standards and Color Nomenclature."
O	The "Répertoire de Couleurs."
F	The Standard Dictionary's list of colors.
BESA	The British Engineering Standards Association.
SCCA	The Standard Color Card of America, issued by the Textile Color Card Association, eighth edition, unless otherwise noted.
TCCA	The Seasonal Cards of the Textile Color Card Association, referred to by the addition of an S or F, for spring or fall, with the date of the year the card was issued Thus TCCA S28 means the Spring Card of 1928. Further, the Woolen and Hosiery Cards are referred to by the addition of a W or H, as: TCCA S28W.

Acajou. R has an "Acajou Red," 5 J 3. But Acajou is merely the French for Mahogany, and the Acajou in F, analyzed from many textile and paint samples, matches ordinary Mahogany, 7 J 10. R's Mahogany departs from the generally accepted idea of Mahogany color, being too yellowish; his Acajou lies on the other side, being far too light and bluish for any ordinary Mahogany. (See note on Mahogany.)

Alizarin. Artificial alizarin is a synthetic madder, made from coal-tar. The word Alizarin appears as part of many color names of pigments, as Alizarin Red, Alizarin Crimson, etc. These names indicate chemical composition, and not specific color sensations. They should not be so used, and are not included herein.

Alkanet. A term derived from Arabic *al-henneh*, through *al-kanna*, originally the name of the shrub *Lawsonia alba*. The European plant, however, used as a dye source, to which the name was applied, is *Anchusa tinctoria*. Although Alkanet was a very ancient dyestuff, used in the time of the Romans, and doubtless much earlier, it was never of much importance, and was but little used. It gave various violet and greyish tones.

Almond. TCCA F20, Hosiery Standard, and other cards, contained under the name Almond a color, 13 B 6. Why this color should have been named "almond" is a mystery, since it is quite unlike the color of any part of the almond, nut, blossom, or wood. As matched from a large number of almonds, the color of the shell averages 10 F 5; there are small, crumbly places where the color is 10 B 6, and whether the general tone is 10 F 5 or 10 B 6, depends upon the condition of the shell. The skin on the kernel is 12 J 9 to 13 L 11, the latter for older and drier almonds. The meat, with skin removed, averages 9 C 2. It is, however, from the shell, that such color names are taken, and "almond" should properly be 10 F 5.

Alyce, Couleur d'. An Anglicized spelling of the French word *alize* or *alise*, the serviceberry. These berries vary in color from red to dark violet. This color is described in "The Whole Art of Dying" (sic), 1705, as a brown violet. F records in 1892 a color term "Sorbier," which is the French for service-tree, the color being 53 H 3.

Amber. In the natural state, amber varies in color from nearly white, through yellow and reddish to almost a brown. Most of the amber familiar to the public in the form of pipestems and trinkets, however, is chosen from the lighter quality, and is usually dyed to a rather bright yellow. R has Amber Yellow as 10 J 3; TCCA F20 has 12 L 8. Of these two colors, the first is sometimes seen, but the second practically never; the most usual color by far, is 11 L 5. F has 14 J 11 for "Amber," but while it is possible that amber may be found of that color, it is certainly unusual. The term "Amber" is found recorded as a color name as early as 1500. It is unlikely that in those days amber was dyed, and as the alternate term, "Amber White," is sometimes found also, it seems fairly certain that the "Amber" of that period was 11 C 1, for which the second term, Amber White, is herein used.

Angel Red. The pigment colcothar was frequently known on the continent of Europe under the translated form of the name "English Red," which in French became Rouge d'Angleterre. This drifted back into English, in the shortened and altered spelling, Angel Red.

Apple Green. TCCA S24 had 20 E 12 for Apple Green, but while apples of certain varieties show some gradation of green, none are as deep as this. R's Apple Green, while of the proper value, is a little too bright. The general idea of Apple Green, as exhibited in innumerable samples, is unmistakably a softer color, averaging today, 19 J 6, a color which appears also in F, and matches the ordinary green apple.

Asiatic Bronze. This term is bestowed as a mixed-paint name on the color 16 C 9. Unfortunately, the color is not representative of the material for which it was named. If "Asiatic Bronze" refers to modern examples, the color is in no way different from that of American or European bronze. If it refers to the old bronzes, the color ranges through all the greens and browns, no single one of which is in any way representative, even as an average, of the article named.

Azure. This term is derived through the Romance languages and medieval Latin (lazurius, lazulus, azura); from Arabic *al-lazward*, or Persian *lâjward*, the precious blue rock or stone, lapis lazuli (med. Latin, "blue stone"), from which genuine ultramarine is made. The term azure is merely a synonym for blue, and has no more specific significance than blue has. If it could refer to any particular kind of blue, it should naturally be that of lapis lazuli or ultramarine. But it has never even had that meaning. Azure has practically always been a literary term, as far back as it has been used. For example, Tennyson in "The Brook," has "her eyes a bashful azure," and Shakespeare in "The Tempest," writes "Twixt the green sea and the azur'd vault." The name Azure has in the past been attached, for sales purposes, to every kind of blue pigment in existence, but the practise had little vitality and soon died out. Because of the very frequent application of the term, in literature and poetry, to indicate the sky or its color, there seems to be an inclination by some people to believe that Azure means "Sky Blue," sometimes qualified as a deep tone, as in the zenith; but such a supposition is, unfortunately, erroneous. The various authorities have all exhibited specific tones of blue under the name "Azure," but the term is not susceptible of standardization by any authority, any more than is the term "blue."

Écru, Beige, Grège. Concerning these terms, there seems to be considerable confusion. They are all French, and mean exactly the same thing—the color, or the condition, of cloth in its raw, unbleached, undyed state. Écru is simply made up of *é* and *cru* (from Latin *crudus*, raw, crude). Beige is derived from an old dialectal form *bis*, *beges* (cf. It. *bigio*), meaning grey. Both were originally technical dye-house terms and their use as modish color terms dates only from the latter half of the nineteenth century. Up to about 1910, Écru had an enormous popularity. Since then Écru has become nearly obsolete, as a modish term, and Beige now enjoys an even greater popularity. "Beige-conscious" has even been used as a symbol for "preciousness" in the decoration and fashion arts. With little idea of what the words mean, most people believe that they refer to different colors. In point of fact, there is no difference. Écru refers to unbleached cloth of any kind, silk, cotton, wool, or linen. Beige was long used in French dye-houses to refer to unbleached woolen cloth. But this does not concern the color. While some batches of unbleached woven goods vary slightly in the color, that variation has no significance as indicating the kind of cloth, and the large majority, of all kinds, will be close to a certain tone, which is 11 C 2, by actual comparison from a great many samples. Of late years, many extreme variations have been played on the word *beige*, with the invention of such terms as Peachbeige and *Beige Soirée!* And now the textile world has discovered a new French term, a term which means exactly the same thing as Écru and Beige, but which it applies to a different color still. That word is *grège*, which merely means *raw*, as referring, for example, to raw silk in its unbleached, undyed state. The word originally meant *grey*, exactly as beige did, referring to the "greyish" color of unbleached cloth. In English dye-houses, such cloth is still spoken of as "grey cloth." As the Romance languages lacked a word for an indefinite grey color, they adopted one from the old Germanic languages. In Italian this appears as *grigio*, whence *greggia*, a term similar to *grège*, and probably the direct source of it; in French, *gris* (from Old High German *greis*). Anglo-Saxon had *gráeg*, whence English grey; and it also had *grég*, almost identical with this French term grège.

Bermuda. This color, put out in the fall of 1916, was produced, on the TCCA card, with an extremely dichroic dye. The range of color by merely shifting the goods, runs from 1 C 4 to 1 E 12. By careful adjustment of the angle, the dominant tone appears to be 1 J 8, but purer than the ink.

Bice, Verditer. For over five hundred years, there has been great confusion in regard to these terms, and at an early date their original derivation was even forgotten, so that they were used interchangeably and applied to various substances. During the medieval and Renaissance periods, genuine Ultramarine was called (in the med. Latin which was the international language of the times and used in all writings and records) *azura fin*, *pura*, or *optima*, which meant fine, best blue. Another blue pigment was also in wide use, prepared from a natural ore, a basic copper carbonate, of inferior color and lasting quality. This was called *azura debilis*, which meant weak, inferior blue. Medieval Latin manuscripts were written in a very highly abbreviated form of language, and *debilis* was given the form *bis*. This was early taken into colloquial English, in this abbreviated form, with the spelling *bice*. As early as the sixteenth century, the basic copper carbonate was made artificially, and the blue pigment therefrom was called Blue Verditer or Verditer Blue. Some dictionaries give the derivation of Verditer as from a hypothetical Old French term *verd de terre*, green earth, but that is incorrect. Blue Verditer is a real blue, of greenish tone, but not at all green enough to have drawn to itself the name *green* earth. Besides, the real green earth, Terre *Verte*, was in use at the time. It was called then, on the Continent, Terra Verde. Verditer is simply from the French word *verdâtre*, greenish. Later, the terms Bice Green and Verditer Green were given to a green pigment made from another variety of basic copper carbonate ore, with many other synonymous names, from which emerged, to become the principal name today, that of Malachite Green. Among the various synonymous names for Blue Bice are *Azurite Blue* and *Chessylite Blue*, taken from the technical terms for the ore or mineral, and Cendre Blue (*cendre* is French for ashes), an old and very commonly used name. But R has 44 G 11+ for Azurite Blue; 36 K 7− for Chessylite Blue, and 33 L 3 for Cendre Blue. Unfortunately, these colors are not found in this pigment. R adopted the names from O, but altered the colors. The true color of Blue Bice is 36 K 7, as matched from some old, but well preserved samples of the genuine pigment; the color given in O is very slightly duller than this, within the legitimate range of variation.

Bistre. A brown pigment made from chimney soot. At full strength it is quite dark; when reduced with a little white, about 15 C 9. Bistre in the form of water-color paint, was formerly merely a brown vegetable lake; today it is a coal-tar preparation. Bistre is a French word, related to *bis* or *bise*, brown. As *bistre* has been traced back to the sixteenth century, and *bis* to the eleventh, it is likely that the former was derived from the latter, and not *vice versa*. French dictionaries state that the original source and meaning of both are unknown.

Blood-Orange. This was a textile color popular in the latter half of the nineteenth century. No samples or description could be found, and it is so far unknown to the authors whether the name referred to the color of the peel, which would be about 11 I 11, or the inside, which would be about 3 K 11.

Bordeaux. This term, as an English color name, arose during the nineteenth century. Its meaning is seemingly very much misunderstood, in fact, largely unknown. It is not the name of a special color, but is merely a synonym for "Claret." Although this was pointed out in 1905 by O, and doubtless often before by others, the misunderstanding still continues, for the "Bordeaux Reds" of today ramble all over the warm end of the spectrum. (This applies only to American usage; in Europe the mistake is not made.) The facts are as follows. The city of Bordeaux, in France, has been for centuries the great merchandizing and shipping center for the beverage wines of the region, of which the red wines fall into the class called in English, claret. So closely associated have been "Bordeaux" and "claret" for hundreds of years, that the term Bordeaux has been used as frequently as has claret in referring to these wines, and the general literature of England as far back as the seventeenth century teems with its use, in exact synonymity with the term claret. The word claret is used only in English, and does not appear to any appreciable extent in the other languages. It was derived from the old French *clairet*, a diminutive of *clair* (light, clear), and was originally used only as attached to the word *vin*, to distinguish wines of yellowish or light-red color, from the red wines and white wines. About 1600, this distinction was dropped, and *claret* came to mean red wines. The corresponding term to claret in other languages is Bordeaux, meaning the wines made in the valley of the Gironde, and shipped from the city of Bordeaux. While it is usual to bestow the two names Claret and Bordeaux on different colors, there is no agreement as to what that difference shall be, and the two names cover the same range of colors; in general, it may be said that the colors exhibited under these names are usually too dark to properly match the color of the actual wine. They vary to such an extent, that it is useless to record examples. Of all authorities, O comes nearer the correct color; O matches the color in a very close average, 3 K 4. *Claret Red:* also a very old synonym for the term claret, used side by side with it for more than *four hundred years,* as the descriptions plainly show. Yet TCCA F26 applies "Claret Red" to a color, different from its "Claret." This is awkward in so far as it tends to invite error. *Claret Brown:* another very old synonym or alternate term for Claret. But R, who adopts it, seemingly without knowledge of this fact, chooses to interpret it literally, and applies it to the color 7 L 9, which is difficult to reconcile as a color for claret.

Brazilwood. A name given to several varieties of the tree *Caesalpinia,* from the wood of which a dye is extracted. The tree was not named after the country, Brazil, but the country after the tree, because of the great numbers of the tree found growing there. The word "brazil" was in use centuries before the discovery of America, and was derived from the Italian *brage,* or Spanish *brasas,* meaning "glowing coals," a reference to the bright red color.

Brewster Green. A term which had a great popularity in the Victorian Era as a coach color, and is still used for automobile bodies. It is equal to 24 L 1, darkened nearly to a black.

Brick Red. This color is a difficult one to standardize, since in any batch of common bricks there is considerable variety of color, nor can it be controlled in firing. R has 6 J 10. O has 5 B 12, and also 6 B 11, the latter being the "Latericius" (Latin for Brick Red) of Saccardo, with this note: "In our opinion, the designation Latericius should rather be applied to lighter tints, since these occur more frequently in bricks." But there is a special term in Latin for the lighter brick colors: Testaceus. As a matter of fact, an examination of a large number of common bricks showed that while 6 J 10 and 5 B 12 do appear, with many closely similar colors, Sacarrdo's Brick Red, 6 B 11, is much in the majority, and is supported by average practise.

Brown. The TCCA has placed "Brown" in its standard card as 7 C 12, also "Dark Brown" 8 E 11, and "Medium Brown" 7 C 12+. But these terms, both as to names and color, are absolutely generic and meaningless, unless a specific term is attached. Hence they are not susceptible of standardization. The word Brown is from Anglo-Saxon *brun,* brown, by metathesis of the sound r, from *burnen,* burned (*byrnan,* to burn).

Brown Bread. The old "brown bread," the crust of which furnished the idea for this color, 14 L 12, was not of the type known in America as "Boston brown bread," but was made with rye flour, or rye and some white flour mixed.

Brunswick Green, Chrome Green. The term Chrome Green should properly be applied to *chromium oxide,* as it used to be in Europe. In America, however, Chrome Green is applied to what is essentially a double precipitate of Chrome Yellow and Prussian Blue, and this practise has recently begun to be followed in Europe. The term Brunswick Green is sometimes used as synonymous, but properly Brunswick Green may also contain 60 per cent or over of barytes. *Milori Green, Cinnabar Green,* and *Zinc Green* are also less frequently used synonyms for Chrome Green. Since the hues of these pigments vary according to the percentage of yellow or blue contained, no two makers agree in this respect.

Buff. The word Buff is derived from buffalo, an Anglicized spelling of Italian *bufalo* (from Greek *boubalos*), the common Old World ox. The name buffalo was later given to the North American bison, but as such has no connection with the word buff. Buff originally meant a yellowish brown, soft, light leather (oil-tanned calf or goatskin, of the chamois class, still called "buff leather"), especially as used in soldiers' uniforms in former days; and then came to denote its color. Though the term has long been felt to be rather generic in character, there seems to be no reason why a standard should not be possible. The textile "buffs" (TCCA and F) are too pinkish to fall in line with the general understanding of this color. In the paint industry the term is in very wide use, alone and with such adjectives as dark, medium, light, deep, pale, shade, tint, clear, rich, warm, tan, brown, etc. A large collection of such samples, however, proves that these adjectives have absolutely no meaning whatever, as "Dark Buffs" are found, which are actually lighter than some other "Light Buffs," and *vice versa.* Taking the entire collection as a whole, there is unmistakable indication of a striving for a certain kind of color. The central color of the group is 11 K 7, a color which is also the proposed standard of the BESA for "Middle Buff." It would be advisable also for the terms Light Buff and Dark Buff, as well as all the other meaningless adjectives, to be abandoned, and special names be used for any desired variations of the tone, there being no lack of such names.

California Color. A shade popular in the early nineteenth century. It was dyed in three tones, Light, Medium, and Dark, of which only the Medium is shown herein, 14 H 10. There was sometimes used a variety called Bright California Color, of redder tone, 14 A 12.

Cannon. TCCA F18 contained a color by this name, 55 A 2+, while TCCA Hosiery Standard, on the other hand, presents Cannon as 32 A 5. Since this is a very wide difference, which is to be followed? However, 55 A 2+ is a color closely similar to many other named colors, while 32 A 5 is not. Hence the latter would seem preferable.

Capri Blue. R adopted Capri Blue, 36 L 12, from O, where the origin is stated to be the coal-tar dye of that name discovered by Bender in 1890. The name Capri Blue identified in this case a certain dyestuff, and not a color sensation, since the color produced by the dye is susceptible of much variation by control of the dye-process. R's Capri Blue is therefore not included herein. The *Capri Blue* of TCCA F20, on the other hand, is intended to identify a definite color sensation, the name being taken from that of the Island of Capri, near Naples, recalling the tones seen in the famous Blue Grotto.

Carnation. This word was derived from Latin *carneus,* flesh color, and was used in English as early as 1535, as the name of that color. Today Carnation is the name of the cultivated variety of *Dianthus caryophyllus,* formerly called, quite commonly, Clove Pink. As early, however, as 1597, it was mistakenly said that the term "Carnation" was taken from the name of the flower. But prior to 1578, the flower was called "Coronation," probably from its sixteenth century technical name *Betonica coronaria,* derived either from a fanciful resemblance to a little coronet, or from its use in churches on feast-days as a floral crown for statues. Lyte, 1578, in his translation of D. R. Dodoens' "A Niewe Herball or Historie of Plantes," Antwerp, used both Coronation and Carnation as names for the flower, and after 1597, Carnation alone remained. The use of the term Carnation as a name referring to the color of the flower is very recent. Carnation appears in cognate form in most of the languages of Europe. It should be kept in mind that, prior to the twentieth century, Carnation always means Flesh Color.

Carrot Red. This is a very old color term, the earliest record so far found, dating from 1684. The term is, however, a misnomer, as the color called Carrot Red is unmistakably a yellow-orange, and far nearer to yellow than to red. The name should have been, and ought now to be changed to: Carrot Yellow, or Carrot Orange. Both R and TCCA S26 present Carrot Reds (about 3 E 11, R being a little purer than TCCA), but these colors are much too pinkish in tone. The correct carrot color, it would seem, is given in O, 10 C 11, and is followed herein. While it is true that agricultural science has in recent years developed the carrot along the lines of improved delicacy of flavor, with possibly a slight change of color, the traditional color of over two hundred years' usage is that of the common, old-fashioned variety, still in most general use today. An examination of a large number of carrots of different varieties shows that the color is practically identical with that in O.

Cauldron. TCCA F28 contained a color by the name of Caldera, 7 L 12, while again TCCA F20 had a color by the name Cauldron, 6 K 11. But Caldera is merely the Spanish for Cauldron, or copper kettle. In O is a color, 14 A 11 (printed with metallic ink), for which the Spanish name is given as *Caldera,* French as *Chaudron,* English as *Reddish Old Copper.* And *Chaudron* appears again in F, as 4 J 11. In general, all these are correct, for the color of copper kettles certainly varies, mainly according to the degree of oxidation which is permitted to form, or is prevented or removed by abrasive polishing. 4 J 11 and 14 A 11 are obviously new or polished kettles or copper (though 14 A 11 is called in O, "Reddish *Old* Copper"); 6 K 11 and 7 L 12 are plainly old, unpolished kettles. The term would be an excellent one for an international standard, as every language has a name for a copper kettle. As there is immeasurably greater familiarity, world wide, with the color of old kettles than with new, there can be no question but that the term would be best used to designate the darker color.

Cendre Green, or **Green Ashes.** This was the name given to an inferior Azurite Blue, of duller and greener tone. The name was later, by an occasional writer, erroneously given to Malachite Green. R applies the name to 17 A 11, but this pure, bright green has no relation to the original, genuine color.

Cerise. This French word (now Anglicized), though an exact equivalent, in French, of "Cherry," seems from the beginning of its life as a color term to have been used to name a color different from that of the ordinary cherry. The earliest record in English known to the author appears in Wilkinson, "On Colour," (1858) who lists it thus: "Cerise; but not the colour of a cherry." The only authoritative example of today is that in TCCA Hosiery Standard, 4 J 6 herein. Wilkinson gives a colored sample, which is a little less blue in tone. This sample, while not intended by Wilkinson to serve as an exact standard, shows plainly that the color Cerise in that day was also a distinctly bluish red, or reddish purple, quite different from the color Cherry. In O appears a red named *Rouge Cerise,* 2 L 12, but O explains that this is the color of the real cherry of the varieties of Early or Late English, or Montmorency, and notes that "—the Cerise of costumes and textiles is generally wrongly named." This indicates that the color ordinarily called Cerise differs from that of the cherry fruit, the name of which was used literally by O. F gives two colors under the name Cherry, 3 I 10 and 4 E 3. The latter is plainly a sample of a pale Cerise, not a *Cherry.* 3 I 10 is a color certainly seen in some well-known varieties of cherries, and may have been the color originally called Cherry five hundred years ago. Against this possibility, however, is the fact that the term Cherry Red was also in very early use, side by side with Cherry, and actually much more frequently; indeed, the form Cherry proves upon investigation to be usually a poetic term, where the context shows it to be unmistakably the same as Cherry Red, but shortened for poetic purposes.

Today, a very large preponderance of opinion favors the deeper red for "Cherry," 2 L 12. SCCA contains a color called Cherry, 4 I 6, but this is merely a very slight variation from Cerise. It would be of great benefit if an agreement could be arrived at among authorities to the effect that both Cerise and Cherry refer to the same color, for both refer to exactly the same fruit, and both are derived from the same original Latin word *cerasus,* which takes no account of horticultural varieties. There are no other cognate forms in either French or English that could be used, and the close relationship between the arts of color and fashion in French and English thus render confusion inevitable. In mixed paints, Cherry is occasionally offered in a dark reddish color approaching Indian Red, but this is certainly not the color commonly called Cherry.

Chestnut. R exhibits a "Chestnut Brown" and a slightly less grey color "Chestnut." This is an unfortunate instance of using a term with and without a generic word attached, to specify two close colors. For nearly 400 years, both these forms appear in literature as the name of the color of the shell of the common edible chestnut. Wilkinson, 1858, says: "Chestnut color, is, from custom, considered lighter than that of the Spanish Chestnut fruit, and I therefore apply it according to common acceptation. Use Horsechestnut for the richer colour of this fruit." The sample he shows is somewhat brighter than the ordinary chestnut, matching 6 D 12 herein. Syme, 1814, shows a sample of Chestnut Brown, specifying it as the color of chestnuts, which R's "Chestnut Brown" matches, 7 E 10, and as this is a good average match of actual chestnuts, it is followed herein. The idea, sometimes held, that Chestnut refers to the color of the wood as in furniture is entirely erroneous. (See also note on Maroon.)

Chinese Blue. The name given to one of the best grades of Prussian Blue. It dates from the early nineteenth century, and has long been current and common in most languages. The practise, therefore, which has led to the use of a name, so completely and universally established, to serve as the merely ephemeral name of a so-called modish or seasonal color, is unfortunate. TCCA F25 had a color under this name, which, while of the same general hue, is much too pure to stand for the genuine Chinese Blue. (See also note on Prussian Blue.)

Chocolate. In the bestowal of this name upon paint and textile, there seems to have been little or no matching with the actual substance. British mixed paints named Chocolate are practically all much too dark, running, with slight variations, darker even than 8 H 12. American mixed paints, on the other hand, are much too light and yellowish, running 14 E 4, and even 14 B 7. The Chocolate in R, 7 H 2+, and in F, 7 H 3+, are too bluish-red a tone to match any plain chocolate that has not been mixed with other flavoring matter, by which its color also has been altered. The Chocolate in O, 15 H 12, while stated to be the usual color of exterior surfaces of chocolate tablets, is practically a match for the variety known as "Milk Chocolate," of which a number of the best makes match 15 A 9. The Chocolate in TCCA F16, 8 H 10, would appear much the closest to real chocolate, as matched from a number of samples of different makes. While 8 H 10 is slightly darker than these samples, it may be tentatively taken as standard. TCCA F28 contained a color, 8 H 9+, called "Chocolate Brown." To attempt a distinction between "Chocolate" and "Chocolate Brown" appeals to the authors as somewhat impractical.

Chrome Yellow. The Chrome Yellows are made in three standard hues, 10 L 4, 9 L 7, and 10 J 12. Makers of structural and ready-mixed paints generally call these Lemon (or Light) Chrome Yellow, Medium or Middle Chrome Yellow, and Orange (or Deep) Chrome Yellow. As applied to the colors in question, this use of the terms Lemon and Deep is incorrect. The colors were first made for artists' use, the names were thoroughly established, and there appears no need to alter them. Some makers of structural paints maintain the correct names, and all should, if possible, do so. The correct names are 10 L 4, *Light Chrome Yellow;* 9 L 7, *Deep Chrome Yellow;* 10 J 12, *Chrome Orange.* Some makers add also a *Chrome Scarlet* (preferable) or Deep Chrome Orange, 2 E 12, but this is not much used. The correct Chrome Lemon is 9 K 2. A still paler variety, supplied by some makers of artists' paints, is called *Chrome Primrose,* 9 K 1.

Cinnabar (Zinnober). The name Cinnabar has been improperly applied to a mixture of Prussian Blue and Chrome Yellow. The word Cinnabar comes through Latin from Greek, where it was used at least 2,500 years ago as the name for the mineral mercuric sulphide, called, when ground, Vermilion, or sometimes, Cinnabar Red. Cinnabar Red being known as a permanent color, the term Cinnabar Green was unscrupulously attached to the above-mentioned impermanent mixture, with the implication that the Cinnabar Green was as permanent as the Cinnabar Red. TCCA F24W had a color, 6 L 11+, called "Cinnabar," but such application to dyed colors invites error. Strictly speaking, the name Cinnabar should not be applied to any substance other than mercuric sulphide.

Citrine. In this term, we have the remarkable instance of a complete change in an ancient color, due to the influence of a single writer, George Field. Citrine developed from Latin *citrinus,* lemon-colored, into French by the eleventh century, and was taken therefrom into English in the fourteenth. In the early nineteenth century, Sir David Brewster's classification of colors in terms of mixtures of Red, Yellow, and Blue (which is still correct, so far as pigment mixtures is concerned), was pretty generally accepted. D. R. Hay, following Brewster, elaborated a system, making use of the terms *primary, secondary,* and *tertiary* colors. To the tertiary color produced by the mixture of the secondaries Orange and Green, Hay gave the name *Citron.* In 1835, George Field published his "Chromatography," which for the balance of the century enjoyed great popularity, and thoroughly established the primary, secondary, tertiary system. Field, however, preferred the word *Citrine* to Citron, and was followed in that use by all succeeding writers. This color, the mixture of Orange and Green, is 14 L 6, as standardized by R, and is today—almost entirely—the only color known under that name. In French, however, Citrine still means "Lemon-colored," except for a very partial use of the color 14 L 6, which has crept into the language from English. TCCA S20, in spite of the complete establishment in English of Citrine for 14 L 6, which every school child knows, performed the amazing action of using Citrine for a true lemon color, 10 L 2! Notwithstanding the fact that Citrine in French is Lemon color, Field had ruined the word Citrine as an international term, which it had truly been since at least 1386. But in French, the term "Jaune Limon" is also used for lemon color, and there is a strong probability that this term would eliminate the French use of Citrine for lemon color, by the growing use of Citrine for 14 L 6. So that, again, the possibility of an international term is prevented by the action of the TCCA, at least temporarily. It is needless to say that Citrine should never be used for Lemon, in English.

Cloth Color. A term that appears in early eighteenth century New England records sufficiently often to indicate that it had considerable popularity. So far, it has not been identified. It is possible that it referred to the color of unbleached and undyed cloth. On the other hand, there seems a likelihood that it referred to the dark blue of indigo. *Cloth* is from Anglo-Saxon *clath,* and its Northern origin provides the reason for the primary meaning of the word as indicating a woolen weave for personal wear, that is, for *clothing.* The word cloth is now applied to various textiles, and while it did take on the secondary meaning of textile in general, such use has been relatively infrequent, and recognized as of the vaguest indication. From very early days, such woolen cloth was dyed blue, first with woad, later with indigo. While other colors than blue were dyed, that color has, ever since the Middle Ages, commanded an enormous popularity. In colonial America, every housewife had her indigo pot in the back shed, and the pedlars of indigo, who went about the country, came into being to fill a very practical need of the time. In the Southern states, the growing of indigo was begun, so great was the demand and the consumption, and would have been successful, had not, a trifle later, the much larger profits from cotton growing naturally attracted all the efforts and acreage of the planters. Research in regard to "Cloth Color" is desirable.

Colibri. TCCA F20 contained, side by side, two colors, *Hummingbird* and *Colibri,* the latter being merely slightly darker than the former. But the two words mean exactly the same thing. The word Colibri was adopted from a similar term in the Carib language into several European languages, and has been used in the above spelling in both English and French for over two hundred years!

Colonial Buff. It should be noted that this color has no relation with the Buff of the famous Blue and Buff uniforms of the American forces in the Revolutionary War, but is a name devised by R for 10 G 2+, by analogy to the popular mixed paint color, Colonial Yellow, of which it is merely a tint. By a similar practise, the word Colonial has in recent years been attached to such terms as Ivory and Cream, but the colors shown have differed in no way from plain Ivory and Cream.

Colonial Yellow. A fairly old and very widely used name in the mixed paint industry. A collection of samples of present-day paints shows that if the name ever had application to any certain yellow, it has long since been forgotten, as the Colonial Yellows of today range from pinkish tones to greenish tones, no two of which are alike. The Colonial Yellow of F, 11 K 3, was an average taken in 1893, and as it is a fair average of that of today, it is recommended as the standard.

Cornflower. SCCA, 7th, contained a color 44 E 8, named Cornflower, which was much too violet to represent this flower. Another color, 43 E 10, called "Cornflower 2," appeared in TCCA S22, and the first "Cornflower" was dropped from the succeeding SCCA, 8th. "Cornflower 2" is still, however, too violet. The color of the cornflower as given in R, 42 C 10, as checked after many comparisons with actual flowers, appears to be correct. TCCA S25, repeating "Cornflower 2," contained also *beside it* another color called "Bluet," 43 B 7. But *Bluet* is merely the French word for Cornflower! The French cornflower or bluet, according to O, which usually gives very accurate matches of flower colors, is 34 F 8, a little greener than the American variety, exactly the opposite of the textile "Bluet."

Crimson, Carmine. In the fifteenth century, this term was spelled, with many variations, *cremesin,* from medieval Latin *cremesinus,* a variation by metathesis of the sound r, of medieval Latin *kermesinus, carmesinus,* whence developed both the words crimson and carmine. Originally, and for a long time, it meant solely a bluish red dye derived from the Kermes insect, which also was the source of the original scarlet dye. After the discovery of cochineal, the dye was taken entirely from that source. Color makers sometimes offer colors called "Carmine Lake," as well as "Carmine," but "Carmine" is already a lake, and any such use of words is meaningless. These "Carmine Lakes," as found on the market, vary from deep brownish maroons to ordinary carmine color. They are merely sales products, and today, of course, are coal-tar products (which is no detriment, however). Even genuine Carmine is practically obsolete, as it is quite fugitive, and several permanent pigments are available with all the richness of carmine. It would perhaps be well if the name also were allowed to become obsolete. *Crimson,* in reality, is a generic term, and can no more be applied to a specific color-sensation, than can Red itself, the former within smaller limits, of course. Crimson means, and has always meant, simply a red of bluish tone, just as scarlet means a red of orange tone. The range of scarlet, however, is very small, while that of crimson, running into that of the purples, is wide. This is due to the variable response of the eye to light waves of different wave-lengths. The narrowness of the scarlet band is apparent in a spectrum. It is therefore possible to select a central or characteristic Scarlet, while such a selection of a Crimson is impossible.

Crimson Lake is sometimes classed as a synonym for Carmine. Both are today cochineal lakes, when genuine (they are usually coal-tar products), but Crimson Lake contains more of the iron oxide or aluminous base, and is not so deep or brilliant as Carmine.

Crushed Strawberry. This color had an enormous popularity in the late nineteenth century. O records it as 1 H 3, describing this as the color of the actual crushed fruit. F records it as 6 J 4, which is sufficiently far from the actual color to make it seem likely that this was the color as used in the world of fashion.

Cyaneous. Derived from ancient Greek *cyanos.* Homer was one of the earliest users of the term, employing it, in various forms, forty-five times in the Iliad and Odyssey, with the general meaning of dark blue, and sometimes, poetically, of merely "dark." The etymology of the word has not yet been determined.

Dandelion. TCCA S19 had a color, 11 K 7, by this name. By careful match with many actual dandelions, this has been found too dull and reddish. The central portion of the flower-head, occupied by the stamen tubes, is 9 L 6 in color. The outer part of the head, the corollas, is 9 L 2. The general effect is about 9 L 4.

Delft Blue. This is an excellent illustration of the improper handling of names and colors. There is no lack of old Delft ware in the world; most museums have collections, and many families have pieces left from their grandparents' store of chinaware. In addition, the color is a very popular one for china, and is used today very widely. The name is due to the fact that the potters in the city of Delft, Holland, about the beginning of the eighteenth century, first succeeded in imitating this particular color, found in chinaware imported from China and much admired. It was called then "Oriental Blue." This color is remarkably staple. There is slight variation, of course, but the special tone associated with the ware is absolutely unmistakable. Yet there are no few people, who call all blue china "Delft," without regard to color, character, age, or country of manufacture. And among these must be the majority who bestow names on colors, for the range of different colors found under the name *Delft Blue* is astonishing. The evidence is clear and positive that in many cases the color has been chosen offhand, without making a match from an actual specimen, and in some cases, apparently, without the slightest knowledge of what Delft ware is. Delft ware is characterized by designs in thick lines, with occasional small portions in washes; the value of the blue color therefore varies slightly, but such variation is entirely a secondary matter, which does not affect the general tone or hue of the specific blue of Delft ware. R, for example, has 37 F 6. Such a color might perhaps be found in a specimen in which the body of the ware had for some reason turned yellowish, but it would be rare, and is not characteristic of Delft. The true *Delft Blue,* as studied from many examples of genuine Delft ware, is 38 A 8. Some commercial "Delfts," of course, match this fairly close.

Duck's Egg Green. A name which arose about 1876, but is today used only to a very small extent as a mixed-paint name in England. The name itself is indefinite. There are many species of ducks, and the colors of their eggs vary considerably. Unless the name of the species were given, the term might just as well be "Bird's Egg Green." But assuming that the egg of the common wild (mallard) duck were intended, there is still much variation of color, and this is reflected in the colors found under the names in the paint trade. These colors range from 19 A 5 to 19 F 5, and these are but a few of the colors which the eggs actually show. All such names of general meaning should, if possible, be abandoned as color terms, if the terminology of color is ever to have any exactness of meaning.

Dun. A very old term, seemingly taken into Old English from some Celtic language, prior to 900. It was frequently used to refer to the colors of certain animals, in particular the mouse, the cow, and the ass; and as early as 1000, was used in the forms ass-dun, etc. As used very commonly since then, it means simply a very dull and slightly brownish grey of indefinite tone. It was also very much used as a couplet to other terms, like brown, red, yellow, etc., to express dull, grayed tones of such colors. It is wholly a generic term, and cannot, with the usage of a thousand years behind it, be standardized.

Eggshell Blue, Eggshell Green. A number of British paint makers have colors under these names. While the colors vary slightly, the difference is so small that it is evident that a single color is intended, 27 H 3, under both forms. This color matches the American "Robin's Egg Blue" (see note). The term "Eggshell" is not an advisable one, since the colors of eggs vary so widely, and unless the kind of bird is mentioned, the word is meaningless.

Electric Blue. This color, called either Electric Blue or Electric Green, had an immense vogue during the latter nineteenth century. A color called "Electric" appeared in SCCA as 38 K 7, and another with the utterly meaningless addition of the term "Blue" in TCCA S27W, as 39 J 8. Only the Electric Blue as given in F, 37 I 7, matched in 1892, when the color was originated and at the height of its popularity, can be considered the genuine Electric Blue. The Electric Blue in O is slightly purer. The erroneous term Electric Green was sometimes used for this color, but never gained currency, and is now obsolete.

Elephant's Breath. This famous color name, although frequently recorded and known to all the older generation, has so far, in spite of all efforts to discover an authentic sample for matching, eluded the search.

Emeraude. This word is simply the French for emerald, the gem, 20 J 10. The name *Emeraude* was unfortunately given to the pigment, transparent oxide of chromium, 28 K 11, and has become thoroughly established. Care should be taken, in any reading or reference, not to confuse the two colors. The pigment was also given the names Emerald Oxide of Chromium, Chrome Green, French Veronese Green, and Viridian. Fortunately, these are all becoming obsolete, in favor of the technical term *Transparent Oxide* of *Chromium,* by the use of which no mistake is possible. Some makers put out greens of different hues under all of the names, but that is for sales purposes only.

Eton, Cambridge, Oxford Blue. The "Light Blue" and the "Dark Blue" of the classic boat races on the Thames are among the most famous of English colors. Oxford Blue is the "Dark Blue," Cambridge Blue is the "Light Blue," and is the same as Eton Blue. Eton Blue is the older, and dates from the fifteenth century. It was adopted by Cambridge in 1836. The story goes that the Cambridge coxswain forgot his flag, which it was the custom to carry in the bow, and that in the emergency, someone procured some Eton colors, which were used, and have remained the university color ever since. One report claims that it was R. N. Phillips, of Christ's, who hurriedly got a piece of Eton Blue ribbon from a nearby shop. Another claim is sufficiently interesting to give in full, from a letter in the London *Times* of August 20, 1929, from Captain E. A. B. Stanley, late R. N., The Warren, East Bergholt, Colchester. " . . . My father was E. Stanley, who was 'Captain of the Boats' at Eton, and went up to Jesus College and rowed in the 1836 Boat Race. He always held that if anyone was responsible for the Eton Light Blue becoming the Cambridge colors, 'it was himself,' as he was wearing an Eton scarf, and it was taken from him to be used as the distinguishing color. This fact was generally accepted up to 1900, and is admitted both by Ridley and Kitchen, and it was only after his generation has passed away that doubt arose on the matter." On the other hand, "Old Westminster," in the London Times of Aug. 26, 1929, states that it was not the Cambridge coxswain, but the Oxford coxswain, who forgot his flag, and that someone produced a Dark Blue scarf, which was set up as the Oxford flag, the Dark Blue being thereafter adopted as the official color. The result is that the year at least seems well established, with a possibility that *both* coxswains forgot their flags! The above facts are taken from a discussion on the matter which has been going on in the columns of the London *Times,* and it is to be hoped that the true facts will finally be brought out. As to the exact shades of blues: A dark blue at that time could have been dyed only with three substances, Indigo, Indigo Extract, and Prussian Blue. It is quite unlikely that Prussian Blue would have been used for a scarf, and of the other two, the Indigo Extract would have provided a purer and richer color; but it depends upon how dark the blue was; if it was very dark, Indigo would have been used. BESA standardized "Oxford Blue" as 40 A 12+. For "Cambridge Blue," BESA has standardized 35 J 1+, which would also be standard for Eton Blue. (R has 37 A 10− for Eton Blue. It is surprising that he should have used this color, as it is anything but a "light" blue.)

Extract of Vermilion. This term was formerly in some slight use, and will be noticed in the older books on paints. The term was an absurd one, as an "extract" of Vermilion is an impossibility. It was doubtless intended to be a sales stimulant, by the imputation of being some mysterious sort of superior Vermilion. The pigment so named was merely ordinary Vermilion.

Feuille Morte. There is a color term, "Autumn Leaf," one of those thoughtless and meaningless terms used as color names, which may equally well be applied to a host of colors; everyone is familiar with the riot of color that glorifies the landscape in Autumn due to the colors of the leaves, and the selection of such a term, for application to a single color sensation could only result in confusion. In F is listed a color under this name, 7 C 6, now obsolete. In recent years, a mixed paint was issued under the name, a dark orange, which indicated that it referred to the color of a dead leaf, and not to the brilliant colors of Autumn leaves before falling. For such a case, the term was poorly chosen, for the immediate reaction to the term Autumn Leaf is an idea of bright colors. There had already existed, since the seventeenth century, the terms "Dead Leaf" and "Withered Leaf," English forms for the French *Feuille Morte*. This latter term was in use as early as 1640, naturalized in English. This term appears in many variant spellings, of which the most commonly used were *Philamort* and *Filemot*, the latter being still today actually given in some French dictionaries as the English cognate of Feuille Morte. It is, of course, merely an attempt at an English phonetic spelling of the French sounds. "Dead Leaf" and "Withered Leaf," while used, were overshadowed by the popularity of the term *Feuille Morte*, for over two hundred years. In fact, the evidence seems to show that this has been one of the most popular, if not the most popular, colors and names in the history of fashion. The color, as given in O, is 5 A 12. While dead leaves certainly vary in color, 5 A 12 is nevertheless a good average, by actual study. This is the color, as stated in O, of the leaves when beginning to fall, or if fallen, before they have become soiled and rained upon. *Foliage Brown* is another and recent name for this color.

Flame. A very old color name, in widespread use, in both the forms *Flame* and *Flame Scarlet*, for the color 1 D 12. Although this dates from as early as 1590, TCCA S 22 had a color, 1 L 8, named "Flame." It is needless to say that such a color is impossible in a "flame."

Flesh. In Flesh we have one of those delightful terms that enable a namer to choose almost any kind of a pale color not an actual blue, and uphold his choice by actual examples. For who shall say what type of complexion Flesh is to represent? Three American paint manufacturers select the color 10 E 4; while another has acutally put out on the market under the name Flesh the color 11 H 7! Another has 3 C 10. If these be thought extreme examples, how would you like to present to the world, R's "Flesh Color," which is only a little lighter than the last, or the TCCA "Flesh," 1 B 1−, a color so near to white that it is just perceptibly pink? (Nor need British manufacturers think to escape. Two indeed put out colors named Flesh so remarkable that they are here recorded in the plain expectation of incredulity: 11 E 9 and 13 A 8.) Then there is the TCCA "Nude," 11 A 4; and the TCCA "French Nude," 12 A 6−. The "Nude" is in some respects an excellent general color, though rather too pink for those parts of the body more protected from the light than the face, hands, and arms, to which the meaning of "nude" more properly belongs. O describes "Flesh" as the usual color of human skin, female sex, face and hands excluded, the color being 10 B 2−. Perhaps this may represent an example of ideal beauty in French *chair*, but certainly it is too clear and distinctly yellowish, in general, to match any Anglo-Saxon flesh. Averaging up the lot, we come fairly close to 11 B 2, which may be accepted, at least temporarily, as the average Flesh Color.

Flesh Pink, Flesh Red. These synonymous terms have long been used to differentiate a certain color from "Flesh" color, and properly so, referring to those portions of the skin that have a distinctly pinkish tone, such as the palm, fingertips, cheeks, etc. The same differences appear as in the case of Flesh color with the different types of complexion, and the same wide diversity of practise. TCCA S27H had a color for Flesh Pink that was just perceptibly darker than SCCA Flesh, 1 B 1−. R has 2 B 8. Neither of these has any apparent relation either to the name or to the article. No satisfactory Flesh Pink has appeared in practise as yet, for a match.

Flint Grey. One of the oldest color terms in English, dating from the earliest Anglo-Saxon period, and, from the nature of the case, probably one of the oldest in all language. Flint is a form of silica, generally found in nodules in chalk beds. It was the material from which the prehistoric implements such as arrowheads, knives, etc. were usually made. Other materials were also used, such as quartz, obsidian, etc., the colors of which vary widely. The term "flints" being sometimes used loosely by the layman to refer to such implements as a group, care should be taken not to confuse the colors of these other materials with "flint" grey. Since no actual examples of the "flint grey" of the year 1000 exist, at least none that can be positively identified at present, only an approximate indication of the probable color can be given, by reference to the average color of flint. This is 14 A 1. TCCA F25 had a color, 56 B 1, named "Flint." While flints sometimes show a color as dark as this, it is unusual, and by far the large majority are lighter. The flints used for striking the spark in the old flint-lock muskets would also, by reason of the oil and grime, take on some such color. But the color called "Flint Grey" must have been close to 14 A 1.

Flower de Luce Green. In the seventeenth century, a pigment, 22 D 8, by this name was very popular. It was made from the juice of the thoroughly fermented violet-blue flowers of the common blue flag or iris, mixed with powdered alum. Flower de Luce is an obsolete English spelling of French *fleur de lis.* (In the seventeenth century, *lis* alone meant a lily or lilylike plant of any kind; today *lis*, standing alone, is obsolete, and is used only in compound forms, while *fleur-de-lis* is restricted to the symbolic white lily.) Later the term Iris Green was used also for the pigment; this name is sometimes given as a synonym for Sap Green, but erroneously. The names Pauncy and Pancy Green also appear in English, sometimes used as alternatives for Flower de Luce Green. These terms were early attempts at a phonetic English spelling of French *pensée*, from which modern *pansy* developed. A similar pigment was made from the violet flowers of the pansy, and probably could be made from violet-blue flowers of many kinds.

Fog. The color of fog varies considerably, according to density and hence amount of visibility of objects through it, by which its color is influenced; and also according to location, places where the air is pure showing the inherent color, while the contaminated air in and near cities alters this materially. A number of very careful matches of fog colors have been made. Checking against these, it is found that the "Fog" in TCCA F22, 38 A 3, indicates a condition with a considerable visibility of dark background showing through. The true color of fog, as observed in a direction away from any objects that might alter the color, or when the fog was sufficiently dense to hide any background up to 200 feet would appear as 35 A 2. (See page 13, Comparing Impressions). Jennings, 1926, lists a "Fog Blue," described as mixed with "equal parts of Burnt Sienna and Prussian Blue, lightened up with about twenty parts of White Lead." There must be an error here, as the staining power of Prussian Blue is so great that a reduction with only 20 parts of White Lead would make a very dark color, far too dark for any fog color, being of the order of 15 E 10.

Foliage Green. This is a term which needs careful qualification to be at all an accurate namer of the color it refers to, and even then it can be but at best an average. The word *foliage*, while applying to leaves in mass of any kind, has, as a color term, been taken to refer to the leaves of trees, rather than of plants or vegetables. It need hardly be said that the color of the foliage of different kinds of trees varies materially, but so far as the name Foliage Green is concerned, there is an implied limitation to the ordinary deciduous trees of the temperate zone, the maple, elm, oak, the common fruit and nut trees, etc. With these, and including much of the larger shrubbery, there is variation of color, but there is also a prevailing tone of green. Not in the spring, however. Then there exists a myriad of delicate, tender greens, somewhat pale and pure in tone, of which each variety of tree has its special degree. (It is one of these that is represented in the "Foliage Green" of F, 19 I 7.) But spring colors of foliage last only a very short time, and almost as soon as the leaves are of full size, the prevailing color of the foliage has settled to a tone of green which is fairly uniform—in general landscape appearance. Even here, there is a further rapid change, for by midsummer, or a little before, due to the heat and dust of summer and the increasing age of the leaves, whose life at most is of only a few months' duration, there occurs a slight change to a duller, browner green, a change minute, to be sure, but susceptible of observation by the critical eye. This tone remains constant for the balance of the summer, and this is the only green which may properly serve as that known as "Foliage Green." But again, the difference of color which foliage shows in the sunlight and in the shade is very great. In the sunlight, the general Foliage Green color is 20 J 5, observed at a distance of 100 to 400 feet, on a clear day, and presenting the general landscape tone. In the shade, on a clear, sunny day, the general color is 23 J 4, but the shadow tones have a much greater range than the sunlight, which is fairly uniform. These colors are only to be considered as those present on a clear sunny day.

On a cloudy, but not hazy, day, the general tone is 22 H 6, taken as a broad average. The variations of color seen in foliage, under the influence of differing degrees of haze, cloudiness, distance, landscape features, direction of observation, and time of day, would require a volume to record.

French Grey. A color concerning which there exists, unnecessarily, much confusion of idea. A collection of samples of French Greys shows colors that ramble right across the spectrum in values from very pale to quite dark. French Grey, which is 28 C 1, was first named, or first recorded, by Patrick Syme, in his book entitled "Werner's Nomenclature of Colours," 1814, Edinburgh, and the reproduction of the color from his directions shows that his sample has not faded or altered. There is some tendency to consider French Grey as having a violet tone, as R, who has 43 B 2+, possibly due to an erroneous conception of the mixing directions of Syme (R lists Syme among his sources of names), with its inclusion of Carmine. Syme, however, correctly included Carmine in order to neutralize the greenish tone of the basic grey he used, when darkening it to the value of French Grey, and the addition of the Carmine does not by any means produce a violet gray; 28 C 1 is also upheld by F, as the representative average in 1892, and is further the standard *French Grey* proposed by the BESA.

Gaudy Green. This old color name does not refer to a vulgar and flashy green, as might appear from the name, but to one produced with the aid of *Gaude*. The "gaudy" of the first instance is derived from Latin *gaudium*, which had the synonymous meanings, just as in English, of hilarity, delight, etc. The "gaudy" of the second is an English spelling of French *gaude*, which was derived from an old Germanic *walda*, whence also the English word weld (*Reseda luteola*), a herbaceous plant, the source of the oldest known European dye. *Gaude Green* was produced by dyeing first in indigo, then in weld. A number of tones were possible, of which 22 K 7 is an example.

Gay Green. This term does not imply a joyous, carefree color. It is simply an English form of an older French term *verde gay*, which was a shortened form of *verde papegai*, Popinjay Green, derived from Greek *papagas*, parrot, the source also of the English word popinjay, an obsolete name of the parrot.

Gendarme Blue. TCCA S26 contained a blue named Gendarme, 39 C 12. R also has a Gendarme Blue, 36 G 9. As a matter of fact, Gendarme Blue is an old French color, dating from the nineteenth century, and seemingly in use long before. A note in the text of O states that it was the color used in parts of the former uniforms of the French gendarmes. O gives the color as 37 K 2, which must be accepted as the only authoritative example. F had a very similar color, 39 L 3.

Glaucous. This word, from the ancient Greek, was not a color term until after the time of Homer, who used it (with various endings) to express a *gleaming*, so describing a lion's eyes, and several times the sea under certain conditions. With later Greek and Roman writers it came to mean an indefinite pale greyish blue-green. It is generic in character, and was not used as the name of a specific color. The colors herein are from R; they are modern usages of the terms, and have no indication of ancient usage.

Glowworm. F has the color 37 B 6 for the name "Luciole," which is the French for *glowworm*, but 20 K 3 for "Glowworm." Both were textile colors.

Gold, Old Gold. The true colors of gold and old gold are much misunderstood, except by artists, and are rarely matched correctly in paint and textile, but range all over the warm end of the spectrum. Gold, being a metal, and, in the state it reaches the public, having a polish, its color changes very slightly according to the angle of observation. Especial trouble is caused by the high lights which the polished metal exhibits, by reflection of the sun, a window, or an artificial light. These high lights are yellower than the true color of the gold, but they are also very much more brilliant than any dye or pigment can be, and it is this very high brightness, in *very small areas*, which prevents any similar yellow color in dye or pigment from serving as an imitation of gold, to even the slightest extent. One need only try a little experiment in painting some object to simulate gold, such as coloring a mat or frame for a picture, to have this fact made forcibly clear. If a color like 14 K 7 is used, the frame from a distance of a few feet will look like real gold. Anything lighter and yellower will look like anything but gold. The trouble seems to lie in the age-old habit of calling gold *yellow*, because of the eye-attracting gleam of the high lights, and in its twin habit, no less ancient, of calling all yellow things *golden*, from a maiden's tresses to the declining sun. An example is found in the name of that sturdy flower of the fields the golden-rod. Its color is 10 L 5, slightly grayed by the fine texture of the tiny florets, a color which has no more of gold in it than the blue bells of Scotland.

As a matter of fact, the practise is extremely ancient; the two words *gold* and *yellow* have a single origin, coming down, through Anglo-Saxon, from a primitive Indo-European word *ghel*, which meant *yellow* or *be yellow*. Thus the association of gold and yellow is so strong, that with the average individual the mental idea completely overrules the evidence of his senses, and he does not see the color before his very eyes. That, however, is no excuse for the weird colors put out under the name of "Gold," which are merely the result of a failure to match the color against the material named, in addition to the mental confusion. The general color of gold, when held so that it reflects no bright lights and no other colors from near-by objects, is 15 L 9. When allowed to reflect a little diffuse light, by which its color is best observed, it matches 14 K 7. When golden articles are old they take on a greener tone, 14 K 5, not by tarnish, but by patina. The colors *Gold* and *Old Gold* herein have been very carefully matched against the colors of actual gold plate (by gold plate is meant, of course, real gold articles, not electro-plated ware). These colors, as might be expected, are exactly matched also in O, and a few paint manufacturers also match them. It should be noted that all such terms as "Burnished Gold," "Chinese Gold," "Antique Gold," etc. are merely fancy textile names, and have absolutely no relation in color to the objects named, even were there any special variety of color characteristic of such objects, which there is not. The color of gold is susceptible of change by the addition of other metals, but any decided change in color indicates that little gold remains in the alloy. Such compositions as "white gold" and "green gold" are "gold" by courtesy only.

Goldenglow. TCCA F22 had a color, 10 L 4, by this name. It is to be presumed that this name refers to the flower known by the name of goldenglow, a horticultural variety of the cutleaf coneflower, *Rudbeckia laciniata.* It may be presumed also that the namer of the color 10 L 4 never lived in the country, or had a garden, because no one who has ever seen a goldenglow could possibly give the name *Goldenglow* to that color. When observed in the shade at a distance of one yard the color of the goldenglow is 9 L 6. The goldenglow does not grow in subvarieties of different colors, as so many other flowers do. Comparisons made of the color of a number of these plants from widely different localities shows it to be one of the most staple colors in the vegetable kingdom, remaining undeviatingly true to its special hue.

Golden Green. This is a literary term, in considerable use for a century back to describe the color of foliage as seen in the light of the setting sun, which the acute observation of the literary mind could not fail to note, any less than the trained color sense of the artist. The ordinary individual, by reason of the strong association of the ideas of leaves and their midday green color, untrained and unobservant of any but obvious differences of color, usually fails to see any change. By repeated and careful comparisons on different days, this color appears to be very similar to 12 K 3, with, naturally, subtle variations. This is at a distance of 100 feet. (See p. 13, Comparing Impressions.)

Golden Red. A literary term, in considerable use, in which no exact color significance is implied. It is used for any red of orange tone, in any degree.

Golden Rod. SCCA 7th has Golden Rod, 10 L 6. By careful comparison with many flowers, this color appears a little too orange. A careful examination of the color, in shade, shows it as 10 L 5, while the fine texture of the florets grays the color very slightly.

Golden Yellow. The term *Gold* or *Golden* is also widely used with generic meaning, in such forms as Gold Earth, Golden Brown, Golden Green, Golden Yellow, etc., where the word means *yellowish.* The terms "Gold Yellow," and "Golden Yellow" are quite old. Whether they signified originally the true color of gold, or merely the yellower colors often seen under the names is difficult now to determine. The testing of old formulas shows a brighter and yellower color than that of true gold, and the general practise with mixed paints of the name is likewise a bright orange-yellow. These latter vary, of course, but the average is fairly to be found at 10 L 7, the Golden Yellow of O, so as to make it reasonable to accept 10 L 7 as the standard *Golden Yellow.* It would seem clear enough, from a study of this term, that in this particular case, the intention is to name a certain kind of yellow, and not the color of gold, "Golden" here having the generic meaning of reddish. Gold, especially in its raw state, is sometimes spoken of as "red gold" by prospectors and miners—at least in novels; but every case noted has been for the purpose of rhetorical emphasis. "Golden Yellow" and "Gold" color should be carefully discriminated.

Granite. This term has been made use of as a textile color name. The selection was absurd. Even as to the rocks themselves, the application of the word Granite is of the utmost looseness, since the varieties of granite are limitless, and the colors range through every possibility. So unsuited is the name, that it is felt unwise even to mention the color that was used.

Grass Green. This is one of the oldest color names in human language, recorded as early as 700 in Old English, and used likewise in most other languages, including the ancient ones. The difficulty of establishing a standard is great. There is, first, a wide change of color in sunlight and shadow, with innumerable delicate gradations in both cases, according to botanical variety, alone and in variously proportioned mixtures of seed; and to direction of observation as regards the light, as grass is translucent and shows color by transmission, while it also reflects light, by which its color is noticeably altered by surrounding objects and especially by the blue light of the sky. But beyond this, there is even a change of color caused by the wind, which bends the blades about, so that they are now transmitting, now reflecting light, from various directions. It is therefore first necessary to determine on as normal a condition of aspect as possible. This would be a grass plot in the temperature zone at a place not lower than 36° Latitude, of average good mixture of varieties, observed as a distance of from one to ten yards, during midday, in midsummer, on a day with no wind, away from overshadowing trees, and with a low background, that is, not shut in by close, high trees in the direction of sight (which would materially darken the color); the character of light to be diffuse, that is, either an overcast but not heavily clouded day, or in such shadow as does not in any way alter the normal conditions outlined above. Out in full sunlight, the color would be 18 J 4, but the examination of a great number of paint and textile samples and descriptions shows that the color term "Grass Green" refers to grass in shadow. Of innumerable samples of Grass Greens, hardly any two are found to agree. The Grass Greens of British paint makers are fairly uniform; those of American makers are notable for the very wide diversity shown. One example was actually a dull grey in which a green tone was just perceptible. In consequence of this diversity, many hours were spent by the authors on many different days in matching grass colors, and in a comparison of the Grass Greens of all authorities. It was found that two of these latter were decidedly questionable having no apparent relation whatever to the color of grass: TCCA S23, 21 L 10; and R, 22 J 8, both of which are too far lacking in yellow. The Grass Green in F is even further away, being 19 F 9. On the other hand, the Grass Green in O, though determined in France, was found to be an excellent match for the color of American grass under the above conditions, 21 L 5. (See p. 13, Comparing Impressions.) This is not the "Grass Green" of the English Index in O, Plate 273, therein called "Green Lake" by the French, German, Italian, and Spanish namers, and, mysteriously, "Grass Green" by the English collaborator but the real Grass Green, called therein in the European languages "Meadow Green" or "Lawn Green" (*Vert Pré*, or *Vert Gazon*), again in English "Verdant Green." The color Grass Green in O is therein described as "the general tone of meadows or lawns, nearly close trimmed, observed in summer, from the height of a man, at 1 to 4 meters from the feet, and in diffuse light." Grass in the shade of a tree or any other object, on a sunny day, is a little darker, 22 L 5, or with a tree in the near background, 22 L 6. All the above remarks apply to the ordinary lawn mixture. For lawns of the *Agrostis* type, like Creeping Bent, much used on putting greens, and beginning to be used for fine residential lawns, where the cost is not objected to, the color is slightly yellower, but the principal difference is in the much evener tone of color. The conclusion of the above analysis is, that if "Grass Green" is susceptible of restriction to a specific green, which may be acknowledged as standard in both Europe and America, it would seem as though it could be only 21 L 5.

Grenadine Red. This term was used in O, the source of the color, 1 D 11, being stated to be that of the liqueur "Grenadine." The term was used in the form *Grenadine Red*, and constitutes in O an international term. R adopted the name, but for some reason, altered the color, calling 1 D 11 (just perceptibly purer) "Grenadine"; giving "Grenadine Red" to a new color, 1 F 12; and "Grenadine Pink" to a paler and bluer tone, which was in fact outside of his own scale. We are unable to appreciate any advantage to be derived from such transformations.

Gunmetal. This name has been in use, for the color 48 C 2, for some sixty years. It appears correctly in the TCCA Hosiery Standard. In TCCA F28II it was for some mysterious reason given to the color 32 A 2−, the direct opposite! Yet on the same card, "Light Gunmetal" appears, of the correct red-blue tone, 47 A 2.

Havana, Havana Brown. A term in use since a little after the middle of the ninteenth century, for a brownish color of the nature of a Havana cigar, and hence variable. F has 15 E 10+, which has, by priority, perhaps the best claim as a standard; O has 14 K 9; TCCA F23, 15 L 12+.

Hazel. A very old color name, which all descriptions indicate to be the color of the shell of the ripe hazelnut. O presents what would seem to be the correct color, which, as matched from a large number of nuts, as a check, is 13 J 9. R's Hazel, 14 A 11, is far too reddish and too dark. The Hazel of TCCA F16 is even more distant, being 15 A 12. And F has 7 C 9! The hazelnut has also another name, *filbert*, by which it is more generally known in America. Although *hazel* and *filbert* are both very old names for this nut, TCCA S21 presents a different color under the name "Filbert," 14 G 8+, likewise too dark.

Heather. Prior to 1918, the word Heather was used to indicate a color of a mottled or speckled appearance, and any reference prior to that date must be so understood. In TCCA S18, however, the name was given to a specific color, 45 K I.

Hedge Sparrow Egg. A color term in use for over one hundred years. Several British makers issue mixed paints under this name, but the variation of color is considerable. No actual specimens of the eggs being at this time obtainable, recourse was had to A. G. Butler's "British Birds, Their Nests and Eggs," where the egg figured seems to be 19 A 5. However, the Plates therein were made by lithography from sketches, and as tested by comparison with other birds' eggs in hand, cannot be depended on for exact reproduction of color. The wide divergence in practise above mentioned is obviously due to the usual custom of naming colors merely by recollection. Until the color can be studied from actual specimens, the name had better be used with caution, for it now means quite different things with different manufacturers.

Hunter Green. Hunter Green or Hunter's Green, in French *Chasseur,* is old and very widely used, both as a color name and a color, a dark, dull green, 24 C 11. It is therefore unfortunate that TCCA gives the name "Hunter" to a lighter and brighter green, 22 L 12+, especially since the use of green as a color for hunters' apparel was given up long before 1915, and the use of olive drab and similar shades became universal; hence the bestowal of the name "Hunter" on a color different from the old one is confusing and without meaning.

Ivy, Ivy Green. TCCA S19 has an "Ivy", 23 A 12, and TCCA F27 an "English Ivy," 23 A 12+. These colors are both too pure and rich to appear in any natural foliage, at least any not of the tropics. The real color of the ivy, as matched from growing plants, is that shown in O and R, 16 L 9. F has 30 D 6+ for *Lierre,* which is the French for ivy, but is in fact much too pale and grey for the plant named.

Jade Green. Although this color name is very much used, the color is, in fact, impossible to standardize, because of the wide range of colors which jade exhibits. The term "jade" is used to refer to two substances, which are quite different chemically, but which are quite similar in appearance: the one a silicate of aluminum and sodium (known today as jadeite), the other a silicate of calcium and magnesium (known today as *nephrite*). If absolutely pure, the two silicates would be white, and the various colors are due to traces of other minerals. The term was first used about 1569 in the Spanish form *piedra de ijada* (or *yjada*), literally "colic stone", from *ijada,* "flank", because of its supposed therapeutic value by application to the place of pain. The term was taken into French as *pierre de jade,* whence English *jade.* Towards the end of the sixteenth century, the term *Lapis nephriticus* (from the Greek *nephroi,* "kidneys") was devised as the Latin technical name, by analogy to the Spanish *piedra de ijada.* In 1798 Werner originated the term *nephrite* for the substance, which was not yet known to include two classes of minerals. While it was recognized as early as 1801 that "jade", or "nephrite", comprised more than one variety of mineral, it was only in 1865 that it was definitely proved that this was so. Since that date, the term nephrite has been restricted to the one class, the term *jadeite* being originated for the other. The largest collection of jades ever gathered is the famous Heber R. Bishop collection, and the major portion of this is today in the Metropolitan Museum of Art, in New York City, where the colors were studied in connection with this Dictionary. This collection is described in the monumental work entitled "The Bishop Collection. Investigations and Studies in Jade. New York. Privately Printed. 1906." The two volumes are interesting in being the largest in point of size, and doubtless the most costly, ever printed; and in the preparation of the text, the world's greatest experts on the subject collaborated. In regard to color, the following quotations are of interest. "The entire Collection, when arranged on a color basis only,—that is, regardless of form, date, locality, or substance,—formed a series presenting an almost continuous gradation from white of many different tones, through yellow, gray, and green of various shades and mottlings to black." (page 74). Again: "The color of jadeite is highly diversified, exhibiting an almost indefinite variety of shades and tints. The common colors, however, are tones of white and various shades of green." Among the color-names which are therein used to describe the green tones are: lettuce-green, apple-green, grass-green, pea-green, emerald-green; as well as indefinite terms like "a pale grayish-green". Of nephrite, it is said, page 74: "The color of nephrite varies almost as widely as does that of jadeite, but is characterized by greater frequency of dark shades of green." And among the color-names used to refer to nephrite are: olive-green, seaweed-green, golden emerald-green, spinach-green, sage-green, light sage-green, dark sage-green, dark green to greenish-black, "and many others". It is thus a noticeably important fact that jade experts are unable to use the term "Jade Green" to describe their colors, but have to make use of many other color-names. In commercial use of the term Jade Green as applied to paints, textiles, etc., as great a diversity is found, and the name has no exact meaning whatever. American mixed paints tend to the far bluish extreme of green tone; British mixed paints show all sorts of greens. R for Jade Green has 23 L 2−. The TCCA S20 Card had a "Jadeite" (25 H 8), which was transferred to the SCCA 7th, 1925; but TCCA S16 showed a "Jade", 30 F 9+. But, as shown above, "Jadeite" has no meaning other than "Jade", nor can it have any other or more exact meaning than "Jade Green". In view of the wide range of colors found in jade, where even in the green tones no general tendency for an average color to appear can be found by careful study; and in view also of the corresponding wide range of colors found under the term Jade Green in commerce, it would seem advisable, in order to avoid the confusion which must always exist, to abandon the use of the term altogether.

Jocky Club. TCCA F26 had a color by this name, a dark blue, the richness and purity of which goes beyond any ink to reproduce. Its apparent hue and depth were about 46 I 12, but the color was of almost spectrum purity.

Khaki. First used by certain British troops in India in 1848, the term *khaki* is an Urdu word meaning "dust-like." The original and genuine Khaki color imitates the prevailing landscape tone of the rocky and dusty regions of the Old World. As adapted for other and more temperate regions, a more greenish color was necessary for camouflage purposes, and the term Khaki was erroneously retained for colors that simulated an appearance the exact opposite of *khaki* or *dust-like*, in being that of a landscape with verdure. The genuine *khaki* color so far as can be determined is given herein.

Lake. A *lake* is an insoluble metallic compound of an organic coloring matter, obtained by precipitating an organic dyestuff on an inorganic base. The term is derived from the East Indian *lac* or *lakh*, meaning "a hundred thousand," and referring to the great numbers of lac insects (*Coccus laccae*) which infest certain vegetation. From the resinous secretion caused by the puncturing of the twigs by the larvae, and modified by their bodies, a red dye was made, the source of one of the earliest lake pigments used by the Italian artists of the sixteenth century, who came to apply the term *lacca* to lake pigments from various sources. Innumerable lakes have since been made from all sorts of vegetable and animal sources, and today coal-tar dyes provide a further host of them of every conceivable hue. Terms like Green Lake, Yellow Lake, etc. have no exact color significance, being, rather, expressions of material origin; hence, most of these names are excluded, only a few terms, like Crimson Lake—which actually came to represent, in addition, color sensations—being admitted to this Dictionary.

Lavender, Lavender Blue, Grey. There is much unnecessary confusion in regard to these names, that investigation would readily remove. The name arose towards the end of the seventeenth century and the color referred to that of the flower of the aromatic herb *Lavendula vera*, 43 C 5, as in O. The name first used was *Lavender Grey;* later, *Lavender Blue* was also used. There was at first no color significance in the word *Lavender* as employed in these terms, Lavender here being only a word of specific content to indicate the special variety of grey or blue in question, just as the term *Grass* Green is still used. There are innumerable references in literature by which this may be proved. A single instance here is considered sufficient. In the anonymous work entitled "The Whole Art of Dying" (*sic*), 1705, the form "Lavender Grey" is used, and to make the term more exact in meaning, the author sometimes placed as the heading or title of a dyeing formula the expression: "Lavender Grey or Lavender Colour," wherein the formula describes the dyeing of one color only. It was the middle of the nineteenth century that the generic terms *Grey* and *Blue* began to be dropped, and the word *Lavender* alone to take on an actual color significance. Today the word "lavender" has become so completely a color term, that its derivation has dropped below ordinary consciousness, and some people, indeed, do not even know its origin. The forms *Lavender Grey* and *Lavender Blue*, however, have not become entirely obsolete, but lack of knowledge has occasionally caused erroneous use of them. Certain writers—R, for example—have assumed that they refer to colors intermediate between Lavender and Grey, and Lavender and Blue, R having 43 A 4 and 41 A 7, respectively, colors in which there is nothing of *lavender* at all. TCCA S26 had "Blue-Lavender" for 43 B 7, a usage which, in view of the color significance that Lavender now has, is correct, but very inadvisable. It is interesting to note here an example of the process by which color names pass from the attributative to the specific, and then become generic. If the use of the term "Blue Lavender" should continue, it will lead to other similar combinations, and *Lavender* will come to mean merely an indefinite blue of violet tone. This would be unfortunate.

Lead, Lead Grey. TCCA F22 had "Lead," 55 A 2. O has "Lead Grey" (*Gris de Plomb*), 13 C 1, therein described as "the ordinary color of lead as prepared for building purposes, channelling, roofings, etc." Among paint makers, the use of the term "Lead" is almost universal. As made up, these "Lead" paints are found to fall into two nearly equal groups, which approximate closely the two colors above recorded, from which it is evident that the one group has taken its color from the weathered surface of the lead, while the other has taken it from the new metallic surface, the distinction having never hitherto been pointed out. Since both colors are greys, it is unfortunate that the condition exists, since the lack of proper distinction between the members of such a pair of names as *Lead* and *Lead Grey* inevitably causes confusion. The best solution would be to restrict the term to be employed, for use in describing the appearance of the weathered metal surface.

Leaf Bud. Jennings, 1926, describes a mixed-paint color under this name, 15 H 10. The color of leaf buds is quite variable, ranging from nearly black to light reddish browns. Unless the kind of tree or bush is mentioned, the name Leaf Bud, as a color name, is meaningless.

Leaf Green. This term can only be of the most general approximation to the color of the object it refers to. No two varieties of trees have identically the same tone of green, and even in the same tree, different leaves show subtle changes of color. Also the upper (the side turned to the light) and the under sides have marked differences. The term "Leaf Green" would doubtless mean the upper side. R has 23 E 6; but few, if any, leaves ever reach a color so lacking in yellow as this, there being a tendency towards a green like 23 L 5. The use of the term Leaf Green, for the sake of exactness, would be best avoided, unless the vaguest indication only is intended, embracing the group of colors in the upper right quarter of Plates 22 and 23.

Leather, Tan. The earliest record so far found of *Leather* as a color term is in F, 1892, though it would seem that it must have been in use before. F has 11 E 7 for "Leather," and also a color, *Cuir*, which is the French for "leather," 11 C 6; but both these must have been varieties of chamois skin, and not what is ordinarily spoken of as leather, the oak-tanned hide of the ox. The terms *Leather* and *Tan* are exactly synonymous. *Tan* is a very old term and refers to the color of oak-tanned leather made from ox hides. French dictionaries give the derivation of the word as from a colloquial Latin *tannum*, possibly from a Celtic language; the Standard Dictionary gives the derivation as through French from old Breton (a Celtic language) *tann*, the oak, with reference to the use of oak bark in "tanning" leather. The color of this leather is called, in French, both *tanné* and *cuir rouge;* and in German *lederroth.* That the two terms are synonymous also in English is proven by the fact that the average "Leather" color on the market is identical with the average "Tan." This average is 12 L 11, and it matches that in O, as well as the actual material named, (SCCA 7th had a "Tan," 12 B 6). The form "Leather Red," as used in foreign languages, is much better than the English "Leather," as the latter must be indefinite, owing to the different kinds of "leather" produced from the skins of different animals, a difference which has provided the color terms *Tan, Buff, Chamois.* The term "Leather Brown" has also been used. This color, 14 A 10+, is matched from the modern chrome tanned leather, and forms a convenient term.

Lemon Yellow. By careful comparison with the colors of a large number of lemons, R's Lemon Yellow is found to be too pure and bright, while the two shades in F are much too pale. The Lemon Yellow in O and SCCA are both quite accurate (10 K 3).

Light Blue. TCCA standardized six steps of "Light Blue." Although this Dictionary has in general not included color names of which the adjectives light, dark, etc. form parts, this standardized set has been included. In the SCCA 7th, Light Blue 1 and Light Blue 5 were off the scale used, being greener in tone, and these two were dropped from the eighth Edition.

Lilac. Lilac as a color name dates from the middle of the eighteenth century. When a color is picked for "Lilac," it is frequently too violet and pure in tone. For example, R has 41 E 5; F has 43 E 6; TCCA has 44 G 6. The supposition that Lilac has any such tones is due to the phenomenon of simultaneous contrast, and failure to make a match from the actual flower. The true Lilac color would appear to be 3 G 7, as given in O.

Lime Blue. The pigment to which this name was applied, and which was formerly in wide use, especially in fresco-painting, was essentially a mixture of copper hydroxide and calcium sulphate. It is now obsolete, and the "Lime blue" sometimes sold today is merely artificial ultramarine.

Lime Green, Vert Tilleul. The term "Lime," as applied to colors, has unfortunately been taken from two entirely different trees. In one case, it refers to the color of the citrus fruit of the lime tree (*Citrus aurantifolia*), for which the name is current and correct; in the other, it refers to the color of the samara or winged seed of the European linden tree (*Tilia platyphyllos* or *T. vulgaris*), also grown in America, for which the name "lime tree" was an infrequently used and erroneous synonym, long since obsolete. In French, the lime tree (*Citrus*) is called *limier*, the fruit *lime* (also erroneously referred to by some French people as *limon* or *citron*, which, correctly used, both mean the lemon, *Citrus limonia*); and the linden tree is called *tilleul.* Tilleul or Vert Tilleul appears in F and O, as color names, and the color given is 18 E 1+ (in O, Tone 1). Now in O, while the Italian and Spanish terms are given as the cognates of tilleul (from the Latin *tilia*, linden tree), and the German as Lindengrün (as in English, from *lind*, the name of the tree in the early Germanic languages), the English collaborator chose to use the erroneous name "Lime"—which the dictionaries state to be a corrupted form of linden and not related to the real word Lime—instead of the current and correct word Linden, in use from the remotest beginnings of the English language. R, who uses O as his main source of color names, with the choice before him, unfortunately selected "Lime Green," using it for the darkest Tone 4 in O, 19 J 1+, but getting it a little too dark, as 20 J 1+. TCCA F20W has for this same color 19 J 1, the name *Linden Yellow.* It would seem therefore that the best practise would be to standardize name and color as *Linden Green,* 19 J 1. (See also note on Lime Yellow.)

Lime Yellow. Under the name "Lime," TCCA F16 had a color a little darker than 11 L 2. The color intended is that of the citrus fruit (*Citrus aurantifolia*), but if any of the fruit was used for a match, it must have been quite unripe. The real color of the ripe lime, as matched from a number of actual ripe specimens, is 11 L 5.

Livid. A word derived from Latin *lividus,* meaning "of a dull, leaden-blue color," and used also to describe the color of contused flesh, corresponding to the English expression, "black and blue." The term can hardly be restricted to a single color, but must be represented, approximately, by "Lead," 55 A 2. The term has also been used generically to qualify other terms. O used the form Livid Violet for 4 G 1; but R, doubtless thinking 4 G 1 was not a proper violet, changed the color under this name to 45 I 7−. The advantage to be derived from such a change is perhaps questionable.

Louise Blue. Louise or Louisa Blue is frequently given as a synonym for Prussian Blue. The old pattern books, however, state that the dye used was indigo extract, with a trace of cochineal.

Lumière Green. In 1852, a green vegetable dye, called *Chinese Green* or *lo-kao,* was brought to Europe from China. The following year it was used in France to produce three shades of green, known as *Vert Lumière, Vert-Venus,* and *Vert-Azof.* Of these, only samples of *Vert Lumière* are available, 13 A 8. Lo-kao did not remain in use, as similar greens could be more cheaply produced. It is interesting to note, in passing, that *Lo-kao* was a substance—and the only substance known to the authors—by means of which, with proper control of the dyeing process, every color in the spectrum could be produced. It was used, however, only for greens. O has a "Vert Lumière" which was adopted by R, as 18 I 5.

Lurid. From Latin *luridus,* sallow, dirty yellow. Almost entirely a literary word, applied usually to the color of the skin in disease, fright, etc. to denote a wan, sallow hue, and so first used as early as 1656. Later, at the beginning of the eighteenth century, it became a customary word to describe the color of the sky at the approach of a violent thunderstorm, and generally any aspect of dismal and dull reddish character, with which feelings of a ghastly, ominous, or terrible nature were associated. It was also used as a color name in scientific descriptions during a period from about 1767 to 1871, and was variously described a number of times, as "a yellow with some mixture of brown," "a dirty yellow," "a dingy brown," "grey with orange," etc. In 1871 it was used to designate a dark purplish color. As a color term, it has only a general application, and cannot be standardized.

Luteous. Derived from Latin *lutum,* weld, this term came to refer generally to yellow, of reddish tones.

Mahogany. This term is widely used in the forms Mahogany, Mahogany Red, and Mahogany Brown. All of them refer to the same color idea, and the samples of the colors on the market under these terms show that the generic terms Red and Brown are so variously used as to have no significance whatever. R's Mahogany, 6 G 11+, departs from the ordinary practise as regards this color, being too yellowish. SCCA and the paint trades average closely 7 J 10. Attention is called to the fact that much imitation mahogany exists; wood, stained with a red dye, and generally garish in tone, and usually of too bluish a red. As a matter of fact, the color of genuine mahogany, as found in furniture, varies very widely. It may perhaps be necessary to issue paints and stains under the name of Mahogany, but the use of the name to indicate a specific color sensation would best be avoided. (See also notes on Acajou and Walnut.)

Maise. A fairly old color-term. Both O and SCCA match the color accurately, but R's "Maise Yellow", 9 E 3, is considered by the authors as too light and pure.

Malachite Green. A natural green carbonate of copper found in the vicinity of copper mines, this pigment has been in use for over three thousand years. From ancient times to the Renaissance it bore the old Greek name *Chrysocolla.* Since then it has been called, along with many other names, Mountain Green, Bice Green, Oil Green, and Malachite Green. The last named is the common name today. The color naturally varies, but a good average is that in O, 28 A 9. These are names for a substance and not for a color sensation. For this reason it was an unfortunate mistake that R should choose to apply them as descriptive of specific colors. The names have been in use for hundreds of years as exact synonyms, and are applied to the same substance. R applied Malachite Green to 19 B 7, but Bice Green to 21 I 7, and Oil Green to 21 L 4+. It is obvious that R's Malachite Green was not matched from the actual mineral, since its color, with very slight variation, is 28 D 8. The pigment was also made artificially, but is now obsolete. Unfortunately, and quite unnecessarily, the name Malachite Green was given to a coal-tar dye discovered in 1877, and today there are no less than twenty different Malachite Greens, with distinguishing letters and numbers attached. Some people even believe that the dyes are the only and original Malachite Green.

Mallow, Mauve. The color named *Mallow Purple* has been in use since 1611, for 51 I 3, the color of the flower of the common Mallow (*Malva rotundifolia*), which is accurately matched in O. R applied the term *Mallow Purple* to a purer and bluer purple, 50 D 10, which no Mallow could probably possess. In French, the cognate of Mallow is *Mauve*. It is unfortunate that this name Mauve was given to the first coal-tar dye, discovered by W. H. Perkin in 1856. It was first known as Perkin's Violet, and, in honor of its discoverer, that name should have been retained. The dye today is obsolete, and "Mauve" tones are produced by dyes which have their own special names! Thus the erroneous application of a name goes on, even when the process which was the cause of it is obsolete. The original color of the genuine Perkin's Violet, or Mauve dye, in full strength, was 41 K 12, but the dye was used to produce all lighter tones, which were no less "Mauve" in being light. An example of modern "Mauve" is TCCA S26H, 2 B 1, which can be neither the dye nor the flower! O established *Mallow* (in its cognate forms) as an international color term.

Mandarin Orange, Mandarin Red. This color name came into use sometime prior to 1883, and has as its source, the color of the fruit of that name (*Citrus nobilis*), as matched from specimens, agreeing with the color in O, 11 B 12. Although this origin is a matter of record, it seems to be forgotten or unknown today, and the most widely different tones are found under the name. No color but 11 B 12 can be considered the correct "Mandarin Orange." A little later, the name was unfortunately given to a coal-tar dye, of a different tone; this dye was made by most manufacturers under the name "Orange II," but a few were not satisfied with this, and had to bestow on it various fancy names, among them, "Mandarin G Extra," 1 D 12, and likewise "Mandarin GR," applied to a still redder orange dye, 1 H 12. TCCA F23 had a color, "Mandarin," adopted from the tones produced evidently by these coal-tar dyes, since it falls midway between them, being 2 F 12. TCCA Hos. Standard Card also had a "Mandarin," but fails to maintain 2 F 12, being 2 D 12. O refers to the dye under the name "Mandarin Red." To prevent confusion with the geniune color of *Mandarin Orange*, the name "Mandarin Red" should be used for 2 F 11, in place of the indeterminate "Mandarin."

Marigold. This color term has been in use for over two hundred years. F has 1 E 12, obviously a textile color, and far removed from the real color of the marigold (*Tagetes erecta*). TCCA F20 had 10 L 12, which is nearer, but still not a good match for a flower of such enormous popularity as the marigold, and so easily available to anyone for matching. This flower, grown for years, with seed from many different localities, shows its color to be extremely staple: 9 L 10, but slightly purer.

Maroon. This spelling dates from the close of the eighteenth century. Prior to that time, the original Italian spelling was used, *marrone*, which developed into *marone*, and so into *maroon* (in French, *marron*), all three forms being found during the nineteenth century. The word means chestnut, and, as a color term refers to the color of the large Spanish chestnut, not to that of the slightly lighter small chestnut, which grows in more northern regions. Chestnut is derived from an earlier *chesteine*, from old French *chastaine* (mod. Fr. *châtaigne*), which came through Latin *castanea*, from Greek *kastanea*. Cognate forms of the word chestnut exist in nearly all the European languages, and are likewise used as names for the color of the small chestnut, 7 E 10. The color of the modern "Maroon," which is today generally accepted as a color name, apart from its origin, varies from 7 H 4+ (SCCA) and 7 J 4+ (R), to 7 L 7. This last, with variations extending to 7 L 12, is the "Maroon" of the paint industry. The extremely widespread use of Maroon in the paint trades, by far its largest users, require that the color be standardized from that standpoint. The BESA has the proposed standard Maroon as 7 L 7+, but that seems unnecessarily dark. The large majority of Maroons found in actual practise—practically all, in fact, in England as well as in America—are not so dark. Of a large number of Maroon samples collected, a very few run darker than 7 L 7, but a few, on the other hand, run lighter; which would counteract them in the average, which is 7 L 7. (See also note on Chestnut.)

Mauvette. TCCA S26 (Shoe and Leather supplement) contained a color by this name, 8 H 9−. But R had already used the name Mauvette in 1912, for the color 41 C 4, and should therefore have priority, especially since there exists a great number of textile means for colors closely similar to 8 H 9, while there are extremely few names for colors similar to 41 C 4.

Merroon. This word looks like a misspelling of Maroon. But Bemiss, 1806, who used it, speaks of the color as being "brighter than madder." *Merroon* is definitely not an English word. There are two French words from which it could easily have been derived in this spelling: *mouron*, red pimpernel, and *muron*, red raspberry. The dyeing directions in Bemiss are not exact enough to follow in the laboratory, with assurance of obtaining, to any degree of accuracy, the color he was describing.

Milk White, Skimmed Milk White. In Syme's book, "Werner's Nomenclature of Colours," Edinburgh, 1914, Syme, whose work shows unusual accuracy, observes that he has changed the name of Werner's

"Milk White" to "Skimmed Milk White," the color given being a white tinged with a little Berlin Blue and Ash Grey. The distinction—and it implications—are worthy of notice.

Mineral Brown. This name, or its synonym, *Metallic Brown*, is occasionally found given to specific colors in paints. It has, however, long been used to refer to any native earth colored by iron oxide, etc., and the term is practically meaningless so far as exact color sensation or chemical composition is concerned.

Minim. A name used to refer to the color which appeared in the habits of the Franciscan monks in the seventeenth century. It has not yet been identified by the authors.

Mode. This was a term used in the ninteenth century to indicate a *class* of colors which were dyed with a combination of red, yellow, and blue dyes in varying proportions. The resulting colors were usually on the pale order, running from neutral grays to strongly tinted greys of all hues, the same colors which are today loosely called "pastel" shades. The term originated in France, and while the proper form *gris mode* was often used, the word *mode* was no less frequently made use of, it being understood to be merely a shortened form. The old pattern books contain hundreds of samples of different colors, of every conceivable hue, all called "Mode." In consequence, the average person who runs across one of these samples sometimes thinks that the word "Mode" is a name for that particular color! But as a matter of fact it is not.

Morocco, Morocco Red, Moroccan, Marocain. Morocco Red, both as a color and a name, is widely known in several languages. It was standardized by O in 1905, and was also in general use long before, and was included in R. In French, the two forms: *Rouge marocain* and *Rouge marroquin* are in use, for the same color sensation. But the word *marocain* means properly a man who is a native of Morocco; while the other word *marroquin* has been, since the sixteenth century, especially applied to the leather made originally in Morocco. It is the color of the leather to which reference is made in the color name, 6 K 11, and not, of course, to the color of a Moroccan man. All the above forms of the name have been in very widespread use, and long recognized merely as synonymous or alternative forms. In spite of this, TCCA F19 used a "Morocco"; TCCA F25, a "Moroccan"; TCCA F28, a "Morocco Red; TCCA S27 a "Marocain"; all being dull reds, but differing among themselves, and from the genuine standard *Morocco Red.* Among names practically identical, there is danger of considerable confusion. To avoid it, all terms, except *Morocco Red,* might be declared obsolete, and its specific color recognized as 6 K 11.

Moss Green, Old Moss Green. There is great diversity of opinion on what should constitute *Moss Green*, perhaps due to the wide range of colors exhibited by the many varieties of moss, and by the same moss at different ages. O alone has specified the variety and age of the moss adopted as the origin of the color therein. "Moss Green," 21 K 2+, is described as the color of the young moss, varieties of *Hypnum*, notably *H. triquetrum* and *H. squarrosum*, which is ordinarily used for packing purposes and which frequently appears in lawns. "*Old Moss Green*", 14 L 2, is described as the color of the moss after it has become old, as in the shops. TCCA "*Moss*," 14 L 5+, is nearer to Old Moss Green than to Moss Green. O further has a third color, 21 G 10, called *Vert Mousse Teinté*, that is, Dyed Moss Green (but given by the English collaborator the name Bright Moss Green, an unfortunate selection, as the color shown in the direct opposite of "bright"), the color of stained or dyed moss, used in special packing. This color is practically that of Light Chrome or Brunswick Green. The "Moss Green" of British paint makers varies widely, from brown to a pale blue. Among American paint makers, the color varies much less, a fair average being easily struck, and the color here is evidently held to be that of dyed moss. It is merely a Chrome Green, variously toned with a little Raw Umber and Chrome Yellow. The Moss Green of F was 22 F 8.

Mouse. This term, so far as the record has been traced was first used in the form *Mouse-dun*, about 1420, but was used long prior, in Anglo-Saxon, in the form *mus fealo* (mouse fallow). The single word "Mouse," as the color name, seems to have come into use about 1600. The mouse is found all over the earth. Museum specimens from many regions have been examined and compared, and so far as concerns the common wild mouse, there is little variation in color, the general tone being 15 C 6+. The "Mouse" color of textile and paint samples, however, varies enormously, F having 46 A 4; O, 15 C 2; TCCA S 18, 7 C 7; R, 14 A 2+. The correct "Mouse" color or "Mouse Grey" so far as can be determined is 15 C 6+. In justice to O, it should be said that, according to his own statement, his Mouse Grey was not matched from actual specimens, one of the few cases of that kind in O, but reproduced Saccardo's *murinus* (Latin for mouse). Saccardo's work contained relatively few colors, but these were arranged systematically, and a short list of generalized names was attached, all in Latin, and which it was proposed would serve as a scientific terminology. The work is out of print and rare, and seems never to have gained much currency.

Mulberry, Murrey. The word "murrey," in use as a color term in English for over five hundred years, is derived from Old French *moree* (from Latin *morus*, Greek *moron*) mulberry. Other old terms for the same color were: *Gris de Moron, Gris de Morou, Morello,* and possibly *Morellus,* though this last word has not yet been positively traced. For *Mulberry* color, both F and TCCA S22 have 48 E 9−. R applied "Mulberry Purple" to 45 K 10, but no mulberry ever yet had that color. Though TCCA S22 has "*Mulberry*" for 48 E 9−, SCCA has also a "*Mulberry Fruit*" for 56 H 12. Wherein lies the difference?

Mummy Brown. R has a color by this name, 15 C 8, which is simply a somewhat reduced tone of the pigment known as "mummy," which dates from the sixteenth century. R's form, *Mummy Brown,* is quite unusual. The pigment was merely asphaltum, and has long been out of use. "Mummy" was said to have been made from the asphaltum taken from old mummy cases, but this may legitimately be doubted, as the amount from such sources could be only very small, and asphaltum could be obtained very cheaply in limitless quantities from natural sources. Asphaltum caused the ruin of many pictures painted by certain artists who happened to be addicted to its use. The "Mummy Brown" of TCCA F23, 7 E 11, is, on the other hand, strictly a name for a color sensation.

Mustard. The proper color of mustard, in ground form, is 11 J 4, R's Mustard Yellow, 10 J 4, being too bright and pure in tone. When prepared for the table with vinegar, the color of mustard is 12 J 6, or, with a touch of pepper and oil, 13 K 6. TCCA F25 has a color by the name of Mustard, 14 L 7, which seems rather dark, at least, for freshly prepared mustard.

Nacarat de Bourre or **Flock Red.** This was made by dyeing goat's-hair in madder for three days, then dissolving the dyed hair in a potash solution. This resulted, with further preparation, in a dye having various tones of reddish orange, but was fugitive and of poor quality.

Navy Blue. In the early nineteenth century there became popular in the general textile field a color adopted from the uniforms of sailors. This color seems first to have been called *Marine Blue,* followed shortly by the name *Navy Blue.* The color was long dyed with indigo, while of late years synthetic indigo and various coal-tar blues have been tried. Today, however, this derivation seems forgotten, and as to the color, any dark blue is called "Navy Blue," whether its hue is violet or greenish. R, for example, applied the term *Marine Blue* to 37 K 9, which perhaps recalls ocean colors, but is not one used for sailors' uniforms. In French, this color was called also *Matelot* (*sailor*), the term Matelot being taken into English about 1895. The TCCA used both *Sailor* and *Sailor Blue,* and not content with this, added also a *Seaman Blue.* The TCCA standardized *Marine, Navy* 1, *Navy* 2, and *Navy* 3, and in the Hosiery Standard Card, *Navy Blue,* but these standard hues have not been maintained, and the various editions of SCCA show differences both of hue and value. (The eighth Edition has been followed herein in these names.) For Navy Blue, R has 45 F 11; F, 46 I 12. While the colors under the other names mentioned are recorded herein, it is evident that such variations of color are meaningless, and that the names are merely synonymous, and should refer only to the original color as produced by indigo.

Neutral Gray. A neutral gray is one in which no hue sensation is perceptible. The "Neutral Grey" scale in R is not a true *neutral* gray, but is bluish in tone, his middle value in the scale, called "Neutral Grey," matching 46 A 2. A good example of a neutral gray series is shown in the squares A 1 of each group herein. It is absolutely essential in judging delicate gradations of greys that the eye be not charged with the complementary color of some previously observed color. If 46 A 12 be looked at, for a moment, 46 A 1, which is a true neutral gray, will appear yellowish; if 46 L 1 be looked at, 46 A 1 will appear greenish. The word "Neutral" in other terms, such as Neutral Orange, means simply dulled or grayed. It is used in a comparative sense only since the color in question is not of course devoid of hue.

Night Green. This term appears in F as 19 B 9 and in R as 17 K 10. The name was originally given to a coal-tar dye discovered by Keisser in 1866 and now entirely obsolete. The name was that of a chemical substance, from which various tones of color could be produced, and was named "Night" Green, because, under gaslight (the artificial light in use at that time), it did not lose its quality of greenness, which older greens did. In 1899, another dye of similar characteristics was introduced, under the name of "Night Green A conc., 2 B." This dye is made by practically all dye manufacturers, and under a dozen different names. This will serve to show that "Night Green" should unquestionably be avoided. Unless the above facts are known, the name "Night Green," as used by R for the brilliant yellowish green, 17 K 10, holds little actual meaning and is somewhat bewildering.

Nut Brown. Like the terms Tobacco and Wine, *Nut* is completely generic in character. There are various kinds of nuts. Most of them are *brown,* but the brown is a different color in each case. *Nut Brown,* as a color term, dates from 1300, and doubtless before. But what kind of a nut is referred to? While it may be recorded that F has 15 C 8+, and TCCA F20, 15 E 7+, it may be stated that no authority exists by which any such generic term can be restricted to a specific color. An average cannot properly be struck since the various samples may be showing the colors of different nuts, and each correctly, and there is no such thing, of course, as an "average" nut. As in the case of wine, a number of names have already been used as color terms, so that a general Nut Brown is quite unneeded. Some of these were so used at a very early date—Chestnut in 1555, Hazel in 1592, Walnut in 1705. Doubtless the indefiniteness of "Nut Brown" was felt even then. As a matter of fact, Nut Brown has always been far more of a literary term than an industrial one. As a literary term, it need not possess an exact meaning. Up to the ninteenth century, Nut Brown had a very important place in the general vocabulary of colors, but since then, it has become nearly obsolete. But it is nevertheless of imperishable memory, around which crowd associations of some of the most brilliant pages in our incomparable English literature.

Nut Grey. A color described in Hellot, 1798, which must have been in verbal use before then. It was produced in a bath of fustic, archil, logwood, and copperas; but, as the proportions are not given, it is impossible to reproduce the color in the laboratory with any exactness. It is apparent that it was a light, dull brown. The same conclusions apply to it as to the term "Nut Brown," for which it was doubtless a synonym.

Nymphea. TCCA S23 had this name for 43 H 6. It is a French word, derived from the Latin *nymphaea* (from Greek *nymphaia*), meaning water-lily. In botany, *Nymphea* is the name for the genus, which includes many species and varieties, with flowers of various colors. In France, the name Nymphea is commonly given to the ordinary white pond-lily, *Nymphea odorata*, to which the original Greek and Latin names referred. The color of its flower is commonly known as white, not 43 H 6. Not satisfied with this, TCCA S 27 W has "Waterlily" for 19 H 1. But "water lily" is the exact and only English word for the French *nymphea*, and "water lily," in English, means, if a specific variety is not mentioned, always the commonly known white pond-lily. In this instance there is opportunity for confusion.

Ochre. This word is from the ancient Greek *ochros.* It was used in Homer, along with the word *chloros* to express the pallor of the face from fear in battle; *chloros* implied a greenish tinge and later came to denote even a bright green, while *ochros* was used strictly for yellowish tones. Soon after the time of Homer, the term *ochros* was applied to the yellowish native earth containing silica, alumina, and ferric oxide (better called *clay* than *earth*), one of the oldest pigments known, if not the oldest. These clays are found all over the earth, varying greatly in quality and color. The word *ochre* is a generic term, and, in consequence, many defining adjectives have been prefixed to it in order to identify certain distinctive grades, usually according to variation in the color. From very early days, the word *ochre* was sometimes used alone, but it was practically always intended to refer to the pigment more exactly known as *Yellow Ochre,* about 11 L 7. Today, however, the use of the word *ochre* alone would leave a doubt as to which of several differently colored "*ochres*" was meant. The selection of this single word *ochre* as a modish textile name by the TCCA may therefore be confusing, particularly since the sample of color selected to accompany the word Ochre was less like *Yellow Ochre* and more of a reddish type, long known as *Roman Ochre,* 11 L 10. The question of the use of pigment names for color sensations has been dealt with in the section on the history of color standardization, and the absolute certainty of error arising in any such use is pointed out. In this case, investigation shows that *Roman Ochre* is one of the most highly specialized of all the ochres, as regards its color, and the application of the name "ochre" to such a color, without the addition of "Roman," should unquestionably be avoided.

Old Blue, Bleu Passé. TCCA S28 (supplement) showed, among its "Shadow Shades," two differing colors, named *Old Blue,* 35 F 5, and *Bleu Passé,* 36 F 3. This was perhaps unfortunate, since the word *passé* is merely the French word for "old" as used in this sense, so that the one is the exact translation of the other. If French fashion has been using the color "Blue Passé," 36 F 3, or should adopt it, there is bound to be confusion, in view of the close association of the two countries in matters of fashion. It is essential that one of the two be abandoned, and as it seems possible that the term "Old Blue" is perhaps a thoughtless copy of the other, it is here recommended that 36 F 3 be accepted as the color to which both the names Old Blue and Bleu Passé be applied.

Old Rose. This term arose during the Victorian era and has had an immense popularity every since, being, in fact, one of the most popular of all color names. Of the colors shown by various authorities, those in R, 2 J 8+, and O (four tones given, and stated to be from textile samples), are unmistakably too bright to be consistent with the idea expressed in the name "Old" Rose. That in F, 6 J 8, goes to the other extreme of being too dark. SCCA "Old Rose" is by far the best, 4 I 2.

Olive Brown. See note on Olive Green. O presents a color 15 H 7, called "Olive Passée," which is described as the color taken on by the ripe olive after it has been in the preserved state for a considerable period. It is Englished in that work as "Old Olive Green," but that term is unthinkingly chosen, because it is not the *green* that is old, but the *olive.* "Olive Green" is a color name so completely established in popular consciousness that in the phrase, "*Old Olive Green,*" the use of "Old" adds nothing to the significance of the term. The green has altered, or disappeared, and the olive in aging has become a dull yellowish brown. The correct color term, corresponding to Olive Passée, is *Old Olive.* In the author's opinion "Olive Brown", a term that is old and widely used in English, is correctly given in O. TCCA 7th had a color "Olive Brown," a strong red-brown, 14 J 12+, far too rich and powerful to be exhibited in the coloring of any actual olive. It should be noted that this color was dropped from the eighth Edition.

Olive Green. R exhibits two closely similar colors under the names "Olive" and "Olive Green." TCCA likewise uses both forms, but for distinctly different colors. The practise would appear illogical, since by no stretch of the imagination, can the two terms be taken to refer to two different colors and endless confusion therefore results. This is shown, in one way, which is quite sufficient as an example, by the fact that the *Olive* of TCCA and the *Olive Green* of R are in close agreement, both with each other and with the true color of the actual olive, as is O. But while the *Olive Green* of TCCA differs from the true color of the olive, it is the *Olive* of R which exhibits marked dissimilarity from the color of the object in question. Each of these colors in turn differ from each other. The term "Olive" dates from the beginning of the seventeenth century; the form "Olive Green" coming into use about the middle of the eighteenth with the date 1756 furnishing the earliest record. Both remain in constant and world-wide use as names for, not two different colors, but the one single color, that of the olive at maturity, 15 L 4. The sole distinction in the use of the two terms today is that *Olive Green* is generally used in England, while *Olive* is preferred in America. A large collection of samples shows that the representative color under both names is absolutely identical. This use of names concerns only commercial practise. It is the authors' experience, as the result of investigation of both the colloquial and the literary use, that people almost invariably use the term *Olive Green,* and that, today, at least, the term *Olive* is a sophisticated expression which has little real currency. It should be noted that in general the olives with which the American public is most familiar are the pickled olives put up in bottles; these are gathered before they are ripe, and their color is lighter and yellower than it would be at a later stage. While different grades show a slight variation of color, an average, closely matched, is 14 K 6. In a *very few* cases, the lighter and yellower colors have been put on the market as "Olive Green," but by far the majority follow the old traditional color of the green olive, 15 L 4.

Opal Blue. Originally a synonymous *dye name* for *Bleu de Lyon.*

Orange. This is a term which has long since, by universal custom, ceased to refer to the color of the peel of the citrus fruit whose name it bears and from which in both color and name it was originally derived. It has now come to refer to a class of colors, which lie, in the spectrum, from about 600 to 630$\mu\mu$. The color term *Orange* today is entirely generic, so much so, that it is one of the six general colors into which the spectrum is divided. In consequence, it cannot be standardized as a single color. Various attempts have been made, and naturally, all differ. R has 9 L 9. SCCA, 9 L 8. In the paint trade, Orange is generally much redder, though a few makes are yellower. "Orange" also forms the generic part of many combination color-names, and should always be so used. O uses the term "Orange" for the color of the peel of the fruit, 10 L 10, which is an accurate match for the fully ripened color, as tested against California and Florida oranges. In a few cases, O thus uses terms literally, but always explains that fact. However, in view of the development of the word Orange into a completely generic term, such use is likely to cause confusion. In the early ninteenth century, the term *Orange Peel* was devised as a special name for this particular color, 10 L 10. It is an excellent term, and prevents misunderstanding.

Otter, Loutre. The English and French names of this animal came into use as color names towards the end of the ninteenth century. There is a slight difference in color between the American and the French animal, the latter being about 8 C 12−, and the former (northern species), 8 E 11−. This would unfortunately prevent the use of the words as an exact international term but perhaps they could be compromised. O has a paler color under "Loutre," stated, however, to be from a textile sample, which unfortunately for O, was a very poor match. TCCA S16 "Otter" would appear to be correctly matched.

Oxblood. O describes the origin of the color therein under this name as that of the actual substance mentioned. In most cases, such an origin is correct, and it should be in all. But in a very few cases, names have been applied to the colors of other objects, and have become so fixed in that use, that they must be recognized. Such a term is "Oxblood," which names a certain variety of Chinese ceramic ware. This color, as studied and matched from numerous museum specimens, is 7 L 9. There is little variation. The "Oxblood" of R, 6 L 7+, is too bluish in tone, and also too pure, to be readily accepted as a correct match.

Oxford, Oxford Grey. This term, in common use for a century, originally referred to the color of oxford cloth, which was a dark grey. The color has never been standardized, but averages 7 A 1 or 8 A 1.

Oxide Red. Paints have been put on the market under this name, which refers to the fact that their coloring-matter is oxide of iron. The name, of course, is quite meaningless, since oxide of iron is the coloring matter in a number of very old and universally used paints, known as Indian Red, Venetian Red, Bole, etc., and the colors seen in these "Oxide Reds" are in nowise different from that of Venetian and Indian Reds. A popular book on paints describes the coloring matter of Indian Red as due to the *peroxide of iron,* while that of other reds as due to *oxide of iron;* and repeats that such reds owe their coloring matter "to either ferric oxide or the peroxide." This distinction is purely imaginary and is the unfortunate result of a misunderstanding of these chemical terms. Iron in combination with oxygen forms two quite different groups of compounds. One is called *ferrous oxide,* the lowest degree of oxidation. The other group is susceptible of several degrees of higher oxidation, which are called *ferric oxides.* The term *peroxide of iron,* also applied to the members of this higher group, simply indicates by the prefix *per,* their higher rate of valence *in relation to ferrous oxide.* "Peroxide of iron" and "ferric oxide" are merely synonymous terms; during the nineteenth century the form "peroxide of iron" was in use in chemical terminology; today it is practically obsolete, and the form "ferric oxide" is used. Many pigments owe their colors to ferric oxide, and these colors run all the way from yellows to bluish reds. Indian Red and Venetian Red are terms which originally were merely synonymous terms applied to Oxide Reds, and the names were not intended and were not understood to indicate any difference in color, nor to restrict the color to any specific tone. The colors of various batches of pigment, under either name, differed considerably, just as they still do today. There has grown up in recent years a tendency to use the two names as indicating a difference in color, Indian Red being held to be more bluish than Venetian Red. This has crystallized in the proposed standards for the two names in BESA, which are herein matched, for what they are worth. It will be found, however, that such a distinction is purely relative. The two tones are so close together that only by a side-by-side comparison can the difference be appreciated. The result is, that the slightest shift in the colors of the two, as a group, causes the color of Venetian Red to become that of Indian Red, and *vice versa.* And such shifts must constantly occur, not only as between the colors of different makers, but with different batches of the same maker, because of the nature of the substance, the selling price of which makes commercially impractical the matching of the color to an exactly accurate standard. Nor is there the slightest practical need that it should be. The distinction between the two names exists, seemingly, only in England, for only in England is there generally found a separation of the colors as described. But even here, at least two of the largest manufacturers issue their "Indian Red" with the yellower tone said to distinguish Venetian Red. In America, although practically every American book and article on the subject states this same distinction as to color, statements which are merely copied from English sources, of course, the two names are used, but the difference as to color simply does not exist, as found in actual practise commercially. Every book on the subject offers a different reason for the supposed difference of color.

Pansy, Heartsease. The name heartsease has been applied to the pansy since the sixteenth century. It had a very brief life also in that century as an erroneous synonym for the wallflower, seemingly due to the error of a single writer, but died out immediately; it should also be stated that heartsease has been recorded as a local name in the United States for the persicary, or peachwort, but research on this question has convinced the authors that these applications are not examples of true local names, but are simply erroneous and careless applications of the name. It should be remembered that popular flower names are even more carelessly and mistakenly used than are color names, and that the ambition of collectors of folk names of flowers seems to be the gathering of as many as possible, without investigation as to their correctness. (There would appear an urgent need of a comprehensive study of this subject.) Today, however, no one would think of giving the name *heartsease* to anything but the *pansy.* "Pansy" has been in the SCCA since 1915; it appears in the eighth Edition as 43 K 11. But TCCA S20 and S27 contained a color called "Heartsease," for 41 J 10. Nothing but confusion can result from the practise of giving such old and popular synonymous names of the same flower to different colors. The word "pansy," as is well known, is an attempt at a phonetic spelling, in English, of the French word *pensée,* meaning thought or meditation, from the pensive expression and tilt which we seem to see in the little face of this flower. Croker, 1766, translated *pensée* as "Thought Color"! (See also note on Flower de Luce Green.)

Paprika. TCCA S21 had Paprica as 2 K 12, and SCCA, as 2 J 12. This is too red and pure in tone to match any Paprika that appears, at least, on the American market. The color of the average paprika is 3 E 12, and the reddist found only 3 F 12.

Parma, Parme. TCCA F 16 has a "Parme," 44 G 9, but TCCA S 26 had a "Parma Violet," 43 I 9. *Parma* is a province of northern Italy, and *Parme* is merely the French spelling of it. The association of Parma and violet color is due to the fact that the name was given to a horticultural variety of the plant, in the form *Viola parmensis*, long known popularly as the "Parma Violet," in French *la violette de Parme.* In the ninteenth century, the name became also a color name and was extremely popular. The dye used to produce it was orchil, and according to Grison's great work "La Teinture au Dix-Neurvième Siècle," the name was not applied to a single color sensation, but to a group of tones. Being dyed with orchil, the group was not of a bluish tone, as is the tone of the TCCA colors, but was of a purplish tone, and Grison has described them in his main class of Reds, not in his class of Violets. Grison gives two samples, 54 K 8 and 54 L 2+. O has 52 A 3 for Parme Violet, but states that the match is from the actual flower.

Parrot, Parrakeet. Parrot Green dates from as early as 1646. The term *Parroquit Green* was used as early as 1705, as a synonymous or alternate term, reference being found to the expression "Parrot or Parroquit Green" in the description of a single color. TCCA F20 had a color, 25 J 10, named "Parrakeet." But *parrakeet* is merely a phonetic spelling in English of *perroquit.* The terms "parrot" and "parrakeet," in ornithology, are loose ones, covering whole families; there is a tendency to apply the term "parrot" to the stockier short-tailed bird, and "parrakeet" to the more slender long-tailed bird. This tendency was either carried over along with the word from Spanish usage, or was an assumption due to the diminutive form of *Parroquit.* The English spelling parrakeet indicates that the derivation was from the Spanish *periquito*, which is a diminutive of *perico.* But the word is cognate in all the Romance languages, and in French, *perroquet* does not mean "little parrot," but "*parrot.*" The more slender bird is called in French *perruche.* "Perruche" again has been used as a color name, for 22 L 5. The point at issue is, that all these names have no significance as indicating color differences. The whole group of birds, large and small, is characterized by a certain tone of green, which does show small variation, but not according to whether it is called Parrot or Parrakeet or Perruche. A large number of museum specimens of many different species in both groups has been examined and compared, and no distinction of color could be found. TCCA F26W had a "Parrot" for 27 J 11, but it is doubtful as to whether any parrot or parrakeet would, in general, exhibit a color on that order. The correct color so far as could be determined is that of R's *Parrot Green*, 21 L 6.

Pastel. The name Pastel Blue was given to the colors (about 47 A 10) produced by the dye made from the pastel plant (*Isatis tinctoria*), a French name for *woad.* During the eighties, a mistaken idea existed to the effect that the term Pastel Blue derived its name from pastel crayons or chalks, because at this stage of the Victorian Era, there was a great vogue in pastel drawings of a pale, washed-out type, esteemed as especially artistic by the more sophisticated of the intelligentsia of the time, then known as the "precieuses." The pastel crayons or chalks had an entirely different derivation, coming from the Italian *pastello*, crayon. The term Pastel was also applied to other colors of a soft appearance. While these names became practically obsolete, the idea lingered, with the result that today all the light, grayed colors of a certain class are frequently spoken of as "pastel shades." Though thus based on a mistaken idea, the term is a convenient one.

Pea Green. This fairly old term is used mostly in the paint industry. Among British makers, so wide and so evenly distributed a diversity of color exists, that no average is possible. Among American makers, a much more uniform practise is followed. The average Pea Green is 20 G 6. O has a "Vert Pois" (French for Pea Green), 22 F 5, but this is therein described as the color of the foliage of the plant, whereas Pea Green would seem more properly to refer to the color of the pod or the pea itself, uncooked. R adopted this color under the name "Pois Green," but in addition has a "Pea Green" for the color 21 A 5! F has 15 A 3!

Peach. A color name in use since the sixteenth century. TCCA F20 had 2 F 10; SCCA: 9 A 5. TCCA Hosiery Standard: 10 A 5+. The difference between 2 F 10 and 9 A 5 is much too great to be explained as due to any difficulty in matching dyed fabrics. As matched against the fruit, 2 F 10 appears entirely different, which is perhaps the reason for the change.

Peach Blossom. For over two hundred years, the striking sight of the peach tree in bloom has served to provide an idea for a color and name which can refer to no other color than the pure and tender pink of the peach blossom, 1 C 2. From some reason, TCCA F25 has departed from the customarily associated color and has accorded the name "Peach Blossom" to color 4 G 4.

Peacock Blue. The Peacock Blue of SCCA, 37 L 6, is an excellent average of the colors seen under this name. R's Peacock Blue is of the same hue, but is purer. F has 17 K 3.

Pearl. The first form in which this word was used as a color name was *Pearl White*, in 1590. In 1604 came *Pearl;* in 1669, *Pearl Blue;* in 1705, *Pearl Grey.* (At least, these are the dates so far found;

there may be earlier ones.) As to whether the earlier terms referred to the gem, or to mother-of-pearl (the hard inner lining of the pearl oyster; other shells are today also used as the source of this material), has not yet been discovered. Pearl Grey, however, undoubtedly refers to the gem. The *Pearl Greys* of today include every hue in the spectrum, with also the purples. The average, therefore, becomes a neutral gray. And since *Pearl Grey*, as standardized by TCCA, is a neutral gray, 44 A 1, that color has been followed herein. For while pearls vary in color, the majority are a neutral gray. (O has 19 B 1 for Pearl Grey, but states that it was matched from textiles, one of the few cases where O does not match from the object named; its removal, however, from a bluish tone, shows that the color of the gem, and not that of mother-of-pearl, is intended.) F also obtains a neutral gray for the color *Pearl Grey*. R for Pearl Grey has 35 B 1+, but the consensus of opinion, as well as the average color of the gem itself, is far too strongly in favor of the neutral gray for R's color to stand. The *Pearl Blue* of 1669 (Colbert's Regulations) was a pale blue dyed with indigo, about 44 A 2. The general color of mother-of-pearl varies but little, and 44 A 2 is an exact match for the ordinary material. F also has 44 A 2 for "Pearl," while R has 43 A 5 for "Pearl Blue." F's "Pearl Blue" is 35 C 2. It seems likely, therefore, that *Pearl* and *Pearl Blue* referred to mother-of-pearl, and *Pearl Grey* to the gem. Under the name "Pearl," TCCA Hosiery Standard has a color 4 B 7, but this color is meaningless, and shows no connection with either gem or mother-of-pearl. In view of the fact that the word "pearl" has been used since 1604 as a color name, it should probably never have been bestowed on 4 B 7.

Pers. The researches of P. Toynbee, an account of which is given in an essay "The Colour Perse in Dante and Other Medieval Writers," in his volume "Dante Studies," 1902, have proved that this term, recorded as early as 1366 in English, was simply a synonym for "blue," whether light or dark, pure or dull. In the seventeenth century, a certain dark tone of blue, dyed with indigo, was called "Persian Blue." This word "Persian" had no reference to the Persian people or country, but had erroneously been developed from the word *pers*, the name for the same color in the French scale (Colbert's Regulations), from which it had been adopted. The origin of *pers* is unknown. It is still current in French, meaning blue. A word *Perse* in French also means Persian and Persia, but there is no evidence that *pers*, as blue, was derived from this, though it may have been.

Pervenche. This term, which has had a slight run of popularity the last few years, is merely the French word for the flower called in English the periwinkle (Vinca minor). TCCA S22 and SCCA have "Pervenche," 43 D 8, but TCCA S26W has "Pervenche," 45 B 9. As a color term, Pervenche was first used prior to 1892, and F has 44 K 8, which is much nearer the true color of the flower.

Philomel Yellow. "Philomel" is a poetic term for the nightingale, derived from the Greek word *philomela*, meaning "love song." There was a color, about 1865, called "Philomel Yellow," but no sample or description is available, and what the color could have been, is, in view of the term "yellow," rather a mystery. There is no yellow in the colors of this bird. Its breast is 13 B 2, and the remainder of the bird 15 J 11+.

Pink. The name Pink has always been vaguely applied to pale reddish tones of indefinite character. Samples from many sources vary all the way from *yellow* to *brick red*. TCCA has standardized five steps of "Pink," which are shown herein with the superior letter T. These are termed Pink 1 to Pink 5. Although the TCCA number system (discontinued in 1928) indicated that these five steps constituted a regular series, they do not so appear on the SCCA 7th, Pink 1 and Pink 2 containing more yellow than the others. Pink 3, especially, was out of the series, and was practically identical with Pink 4, being minutely deeper and purer. In the 8th Edition, Pink 3 is eliminated as to name, its color being now called Pink 5, the original color of Pink 5 being also eliminated. In the 8th Edition, the colors of Pink 1 and Pink 2 (Pink 1 especially) contain less yellow, and more red. The eighth Edition Pink series is accordingly a far superior set of Pinks, both as to color and gradation. The colors are purer than those of the inks in this book.

Pink, Pinke. In the sixteenth century, and doubtless earlier, these terms were used for one or more yellow pigments, in very general use. The derivation of the word has not yet been discovered. It is not connected, except possibly collaterally and in such a case remotely, with the word *pink* which means a pale red color, the derivation of which is also unknown. A use of *pink* is still seen in the terms Dutch Pink, English Pink, and Italian Pink, synoymous names for the Yellow Lake made from the Buckthorn bush. While there is no direct evidence for the supposition, it seems likely that this Yellow Lake was the one then called, simply, "pink."

Pistachio Green. A fairly old color name, dating from as early as 1789. *Pistache*, the French equivalent of the name was also adopted into English towards the end of the ninteenth century, though the term "Pistachio Green" would appear to have been sufficient for all purposes. The color it refers to is that of the interior of the pistachio kernel, as is stated in O, the correct color would seem to be 19 C 6. F, matching textile samples, has the surprising color, 22 K 5. R is not much closer: 21 K 7. SCCA is fairly close, having 19 A 7+.

Pitch Black. A very old term, suggested by the color of pitch, a tenacious, resinous substance, obtained by the distillation of tar or turpentine. While the term "Pitch Black" has, though very seldom, been used to refer to the specific brown-black color of pitch, it has been almost entirely used, in the vernacular, and sometimes in literature, to express an emphatic indication of complete blackness or absence of light. As early as 1303, it was used as a simile, in the form "black as pyk" (*pik, pyk,* and *pic* are old spellings, the word being derived from Latin accusative *picem,* pitch). The first use as a direct color term, in the form Pitch Black, seems to have been in 1599.

Pomegranate. Both flower and fruit of the pomegranate have served as suggestions for colors. Early in the seventeenth century, the color of the flower was used under the names *Granate* and *Granate Flower,* and later, *Pomegranate Blossom,* the color being 1 J 12. In more recent years, the color of the fruit, under the name *Pomegranate,* has been used. The correct color, so far as can be determined is given in O; 1 E 11. TCCA F19 has 6 L 3; F had 14 D 11, which looks like the color of an old and dried specimen of the fruit, if anything. R has 4 I 6, under the name, "*Pomegranate Purple.*"

Pompeian Red. This has been a rather popular color during the past half-century. As ordinarily used, however, it has little significance, and varies widely. The reference is, of course, to the red used so frequently in the frescos of the villas in Pompeii. This red appears today more or less discolored, from the disaster which destroyed the city. The selection of the dark, discolored portions as a match for a color called "Pompeian Red," is somewhat absurd. There are portions relatively clean and fresh and extremely close to the color as it must have been during the lives of the Pompeians. It is probably only this which can properly be called "Pompeian Red." The color, as matched from clear portions of Pompeian frescos in the Metropolitan Museum of Art, is 45 J 10.

Ponceau. The French name of the corn poppy (*Papaver rhoeas*) also called, in French, *coquelicot.* This is an onomatopoetic name for the cock from his crow, though the color allusion is really to the red of the cock's comb. Both *Ponceau* and *Coquelicot* are also names for the color of the flower, the corresponding name in English being *Poppy* or *Poppy Red,* though *Coquelicot* was adopted into English in 1795, and *Ponceau* about 1835. Its true color, as given in O from actual match, is 1 J 12. The color "Poppy" in TCCA F21, 3 L 9, is too bluish and dull for the proper Poppy color, which has been in use in English for over two hundred years. It may be stated also that Ponceau is mistakenly supposed by some to refer to a red of any tone, judging from the samples occasionally seen; this is possibly due to the fact that dye manufacturers have made a large variety of red dyes of every hue, to which they gave the name "Ponceau" with distinguishing letters and numerals attached. Thus the term Ponceau has acquired a certain generic feeling, and by some is loosely used for any kind of red, especially one of scarlet tone.

Portland Stone. A name used by several British makers of mixed paints since about 1820. No two samples are alike, even for different grades of the same maker. The average, however, is merely the color ordinarily called "Stone"; in fact, some of the "Portland Stones" match the BESA *Light Stone* exactly. Although it seems evident that originally the name was devised for a color similar to that of Portland cement, today the average "Portland Stone" color is merely a synonym for "Stone."

Powder Blue. This term, in use as early as 1707, is a translation of a much earlier old French *poudre blue,* which meant, not "powder blue," but "blue powder." It is a very old and very common name for *smalt,* which is simply powdered blue glass, the color of which is due to cobalt. The name has today a somewhat limited use in the field of mixed paints, but is showing a slight tendency to broaden into a general color term. This use began during the late nineteenth century, and the color was evidently matched from a pale variety of smalt, for while the colors of samples of the Powder Blues of different makers vary, the average is 36 H 2.

Prasine, Prasinous. Terms derived from Greek *prasinos,* which, after the time of Homer, was the general word for *green. Prasinos* is generally given in lexicons as "leek green." In Homer, however, "prasinos" does not appear in that form. The stem of the word appears in *prasiai,* which is commonly translated *garden-beds* or *plots.* Wallace, 1927, suggests the derivation of prasinos, meaning green, as from this word *prasiai,* as logically referring to the green tones of a garden, rather than to the color of a leek, with the statement that "no one knows what shade (of green) a Greek leek was." That is only a half-truth. The *leek* is not the kind of plant that shows changes of color according to latitude and longitude. It is very, very ancient, and its hold on its special characteristics is as strong as its special "fragrance." The color of the leek in America, as matched with extreme care, is 22 J 5, and there is no reason to suppose that the ancient Greek leek differed materially from this. The statement in Wallace—

"The stem appears in Homer only in *prasiai, garden-plots;* the derivation of *prasinos,* the color of a garden or green, is very logical"—is apt, though not intentionally, to be misleading. The word *prasiai* meant a section in a garden in which one kind of plant was grown, what we should today call a "row" or a "bed." Most translations and dictionaries give the term "garden-bed," though "plot" also has been used, though much less frequently. *Plot* is an indeterminate word, but today it is felt as expressing a comparatively large section of land, as applied to gardens, indicating a portion of land given over to a whole garden, in which many kinds of plants are growing. Wallace's expression, "the color of a garden or green," shows how strongly this tendency to consider *plot* in such a sense has unconsciously operated. The *leek,* in ancient Greek, was called *prason,* which is the reason why *prasinos* is translated *leek green.* Homer did not use *prason,* but he used *prasiai* only *twice* (Odyssey, VII: 127, XXIV: 247), and "twice" comes perilously close to being "not at all." The fact that Homer did not use *prason* is no proof that *prason* did not exist in his time. The authors are of the opinion that *prasiai* actually meant, not *a garden-bed,* but a *leek-bed;* and hence that *prasinos* does mean *leek green,* developing later into a general word for *green.*

Primrose Yellow. In use for over three hundred years. R adopted his color (10 H 1) from O, but unfortunately chose the Tone 1 of O, instead of Tone 4, which O expressly states to be the color named. F has 11 L 3+. TCCA 7th had 10 F 3. The real color of the common English primrose (*Primula acaulis,* called also *P. vulgaris*), is 10 J 4, which is also the proposed BESA standard Primrose. The Primrose Yellow of O, matched from *Primula elatior,* is slightly brighter, 10 L 3.

Prussian Blue. There is much misunderstanding of the names by which this substance is known. One authority of high standing states that *Bronze Blue* and *Chinese Blue* have a bronze reflex, and *Milori Blue* and *Steel Blue* have not. Another states the opposite. On the market, all four are found with reflex. Less important writers draw all sorts of distinctions. Chemists, in analyzing samples under the various names, have claimed to find minute chemical differences, but it would be entirely safe to say that samples under the same names from various makers would not show the same respective differences. There is only one certain conclusion to be drawn from all the contradictory mass of statements, and that is, that the name "Bronze Blue" can refer only to a variety with the bronze reflect. The statement is sometimes made that such names as *Berlin Blue* and *Paris Blue* are names of inferior grades of duller color. There is not the slightest ground for such a statement. The names are old and were established before any of the modern distinctions were ever thought of. As a matter of fact, *Berlin Blue* was the original name, and *Prussian Blue* came much later. The substance was discovered in 1704, was first described in Germany in 1710, under the name *Berlin Blue,* and in English in 1724. In accordance with their practise, manufacturers put out the color under all sorts of names—in Germany they reached a very large number—in order to give the impression that they each had a "new" pigment. The color of Prussian Blue, to give it its common name today, varies, even with different batches from the same maker. At full strength it is practically a black. When slightly reduced, it is distinctly a blue of violet tone, but when it is lightened, it crosses over and becomes a blue of decidedly greenish tones. It would therefore be manifestly impossible to give the exact color of Prussian Blue, unless the degree of reduction were also given. R uses four of the synonymous names for four of his specific color sensations: Prussian Blue, 45 B 12; Berlin Blue, 38 J 11; Paris Blue, 36 H 12+; Hortense Blue, 39 H 12. That this is apt to be confusing can be readily appreciated when it is observed that Berlin Blue and Paris Blue, two of the oldest and most widely used synonyms, are given to two adjacent color sensations in the same vertical scale of R's system, one slightly darker than the other! Prussian Blue and all its synonyms are terms which indicate only a chemical substance. In no sense are they names of color sensations, and so undesirable is it that they should be so used, that they have been kept from the color Plates herein, and have been given no plate reference in the Index. Prussian Blue was also used in dyeing textiles, the average color produced being 46 A 12.

Prussian Green. Originally a paint, made by mixing Prussian Blue with various yellows, a poor and somewhat impermanent green, to which the name Prussian Green was attached, from the ingredient Prussian Blue. Being a mixture, in which the proportions were varied at will, there was a wide range of colors bearing this name. R has "Prussian Green" as 30 L 5, but the name has no special significance and its use should be abandoned.

Purple. The word *purple,* both in its English form and in its ancient Greek form, has always been used to refer to that color-sensation produced by a mixture of *red* and *blue.* Homer also used the word metaphorically to express sombre ideas, as of death, sadness, etc., ideas which a tone nearer to blue than to red would best seem to fit. Since the mixture is variable, the name must refer to a class of colors, and not to any specific tone. R has one variety, 51 A 12, which he calls "true purple"; but that is purely an arbitrary personal choice; his color is *a* true purple, but not *the* true purple. The name Purple has sometimes been mistakenly applied to varieties of Violet. SCCA presents under the name "Purple" a color which is merely a slightly deeper tone of its "Violet." The class of *violets* is very limited in range of hue, while that of *purples* is wide. Violet is likewise a generic name, so much so that it is the name applied to one of the six general divisions of the spectrum. For that range of hues not seen in the spectrum, producible by mixtures of Violet and Red, there is no name except that of *Purple.* It is thus an unfortunate error, and a poor use of words, which would tear the name *Purple* from its proper designation and force it on a class of colors for which already there is an excellent and universally used common name.

Putty. Putty is not a substance which is unchangeable in composition. Skilful painters vary both the ingredients and their proportions for a wide range of purposes, regulating the density, wearing qualities, and oil absorption properties to the material on which it is to be used. Naturally, the color changes somewhat, but hardly to the extent shown in mixed paints issued under the name "Putty" by paint makers—who ought to know, if anyone does, the average color of "putty." The general average of such samples is 11 B 2, a color which may be taken as that of ordinary good putty for outdoor use on wooden structures.

"Quaker" Colors. There never was a single, specific color adopted or worn by the Quakers to distinguish members of that sect, either at the time of the preaching of Quakerism by George Fox—about the middle of the seventeenth century—or later. The only requirement in the Quaker costume was for dull, unobtrusive colors, mainly greys and browns, although brown was forbidden for awhile, because a man by the name of Brown had published a pamphlet entitled "The Quaker's Art of Courtship," which ridiculed them. The restriction to dull colors, moreover, applied only to the men, and not to the women, who were allowed to wear bright colors. Such modern color names as "Quaker Blue," "Quaker Drab," etc. are merely inventions of textile manufacturers and paint makers, and have no connection with the Quakers or the colors worn by them.

Ragged Sailor. This term, a universally known and popular synonymous name for the *cornflower* or *bluet,* was used by TCCA S22 for the color 36 A 7, although on the same card 43 E 10 was given for "Cornflower," and in TCCA S25, 43 B 7 for "Bluet" (see note on Cornflower). *Ragged sailor* is also recorded as being a popular name for four other flowers, but such use is erroneous. These may be briefly examined for possible suggestions of color names. The most frequent application is to *Polygonum orientale,* popularly called "prince's feather." This application occurs only in America, and is not made in England. Pritzel and Jessen's "Die Deutsche Volksnamen der Pflanzen," 1883, records the name, but it cannot be found in actual German usage, and is undoubtedly an adaptation therein from American sources. (The color-sensation is an old one in Germany, under the name "Kornblau," from Kornblume, cornflower.) The flowers of *P. orientale* are a bright *pink,* and consist of close cylindrical spikes, arranged in open panicles—a good stimulus to the name "prince's feather," but absolutely not for the name "ragged sailor." The other flowers are the "bouncing Bet" (*Saponaria officinalis*); "love-in-a-mist" (*Nigella damascena*); and "chicory" (*Cichorium intybus*). These three flowers are bluish and somewhat resemble the true ragged sailor or cornflower (*Centaurea cyanus*). They are mentioned in Fanny D. Bergen's "Popular American Plant Names," 1893, but it must be kept in mind that mistakes are made in regard to popular flower-names perhaps more even than to color names. The resemblance of these three other flowers to the ragged sailor explains the error under discussion, without, however, excusing it, or conferring any validity on an erroneous application. The terms "Love-in-a-Mist" and "Chicory" have also been used as color names, but for different colors (see Index). If "Ragged Sailor" must be used as a color name, its color can only be that of "Cornflower Blue," 42 C 10, and nothing else.

Raisin, Raisin Black. Under the name "Raisin," TCCA F24 had 55 J 8, and under the name "Raisin Black," R has 56 A 9. R adopted this name from O, but O has 16 A 7. F has 53 A 7 for "Raisin," but there never was a raisin of that color. The actual color of the ordinary raisin, as matched from a large number of the actual specimens from different packers, is 8 J 8.

Raw Sienna. Undiluted with white, its color averages 13 L 10+. When reduced, it passes through 11 J 10, then lightens in the direction of 10 L 6. R's "Raw Sienna," 11 L 8+, is not in line. Such a color would be called a *yellow ochre.*

Reseda. A fairly old color name, in use in English since 1875, at least, and doubtless earlier. Though it has always been a popular term, few English-speaking users are aware of the fact that it is merely the French for the flower *mignonette,* the scientific name of which is *Reseda odorata.* But F had 23 C 8 for Mignonette and 22 K 5 for Reseda. And SCCA 7th had 21 I 6 for Mignonette and 23 E 7 for Reseda, side by side, though they mean the same thing. SCCA 8th drops Mignonette and has 23 C 7 for Reseda. Of all these, not one is correct. Only that in O, 22 K 1, matches the true color of the mignonette or reseda. R maintains this, and general practise averages it.

Robin's Egg Blue. F has 27 H 3 for this color, a very accurate match, as confirmed by comparison against actual shells. It is essential to note that this is the American robin (*Merula migratoria*), a bird unrelated to the English robin (*Erythaca rubecula*). The egg of the latter is not blue, but a warm-tinted white, spotted with brown, even being clear white occasionally.

Rose, Rose Red, Rose Pink. From the most ancient times, the rose, by the marvelous beauty of its form, fragrance, and colors, has so impressed mankind as to become, since ancient days, one of his leading symbols. The rose, in fact, was the first flower to be cultivated, and some seven centuries before the Christian era, it was crowned "queen of flowers" by Sappho, queen of poets. Perhaps the most famous epithet in history is Homer's *rosy-fingered dawn*. The earliest record of the term Rose Red as a color name, known to the authors, is 1300; it exists in that use in cognate form in many different languages. The three forms, Rose, Rose Pink, and Rose Red have always been in use, not as indicating varieties of tone in the color, but as mere synonyms for the same idea; and they should not be used today—with centuries of universal custom behind them—as attempting to differentiate colors. The color referred to under the name "rose" has always been simply a pure, somewhat light Red, of indefinite character. It cannot be restricted to any specific color, and is not susceptible of standardization by any authority whatever, though that has been attempted. Recognizing this, doubtless unconsciously, neither O nor TCCA uses the term for a specific color, but both make use of a number of combination terms for various tones of red or pink, as is the correct practise. The long list of such combination terms shown in the Index is a sufficient indication of the necessity of this use. **June Rose, May Rose.** There have been a few terms like these invented for colors, but since *June is the great month of roses*, when thousands of varieties, of myriad hues, are in bloom, and no few varieties appear likewise in May, such terms exhibit a lack of originality as well as of logic. No authority, and no sophisticated reasoning can make "June Rose," or "May Rose" anything other than a mere synonym for "Rose." (See also note on Tea Rose.)

Rose de Nymphe. O describes the origin of this color as follows: ". . . conventional designation to express the delicacy and freshness (*fraicheur*) of this tint, by allusion to what may have been the color of the flesh of the nymphs of mythology."

Rosewood. There are two quite different woods called by this name, both of which have served as origins for color sensations. The first is the light-colored wood, called in French, *Bois de Rose*, a Brazilian tree (*Physocalymma floribundum*), most familiar in furniture, and called also, in English, *tulip-wood*. The other is also a Brazilian tree (*Dalbergia nigra*), called by the Brazilians *jacaranda*, and by the French *palissandre*. Both of the latter names have also been used as color terms, Palissandre 6 L 10+; Jacaranda Brown 16 A 12−. Care is needed not to confuse the two "Rosewoods," when used as color names.

Russet. This word was derived from Old French *rousset*, *rosset*, a diminutive of *rous* (mod. Fr. *roux*), from Latin *rossus*, reddish of orange tone. It was first used, in English, only as the name of a rough homespun cloth of reddish-brown color. This was the case as early as 1400; about 1562 the word also became a color-term. Today, although it is one of the most commonly used color terms in the language—and one of the most loosely used—namers of colors keep bestowing it on various specific tones. It cannot be standardized, for it has no meaning more specific than *ruddy* or *reddish*.

Sage, Sage Green. An old color-name, recorded in 1596, and doubtless in use much earlier. The form *Sage* is the older of the two, *Sage Green* appearing about 1800, when *Sage*, as a color-name, became practically obsolete. The color referred to is that of the foliage of the common garden sage (*Salvia officinalis*), as has been described many times. The leaves, both green and dried, are used in cooking; or it might almost be said, *were used*, for the use of the old herbs has been practically discontinued in English-speaking countries. Only *thyme* remains in use, and, to a much less extent, *sage*. Formerly every kitchen garden had its plot for herbs, which were not the least important plants in the garden. Today, the only sage known, or any herb, is the dried form, bought in packages in the store, and supplied to the packers by a few professional growers. Certainly in America, and it is safe to say in England also, few people are familiar with the sage as a plant, and hence with the genuine color "Sage Green." The result is that a literally amazing variety of different greens is exhibited on the market as "Sage Green." Their colors range from Sky Blue to Grass Green, from a deep, yellow-toned Brunswick to Marguerite Yellow! They include, in fact, every conceivable kind of green but the right one. Anyone can gather a collection of "Sage Greens," and the evidence will be quite conclusive that the namers of these colors have simply applied the name offhand to any kind of green. TCCA made use of both the terms "Sage" and "Sage Green," but there is no possible or conceivable difference in color which the two terms can express or refer to. If they perhaps point to the belief, which is not impossible, along with R's "Sage Green," 22 A 5, that the name refers to the color of the dried sage, they are still off, as the color of the actual dried sage is, by careful match, 13 C 2. The term *Sage Grey* was used about 1700, but it is not known whether it referred to the color of the fresh or the dried leaves. It would be a good name for the latter. The best Sage Green is that of BESA, which is 22 I 5. F also approximates this color.

Salmon. A fairly old and well-established color. The term appears alone, and also combined with such words as Pink, Tint, Light, Middle, Deep, etc. A collection of samples of these colors shows, however, that these combination terms have no significance, since they are used in the most contradictory way by different makers; the entire group covers exactly the same range that plain "Salmon" colors do. O and R have 10 A 7 for "Salmon," which O describes as the color of the flesh of the fish. SCCA 7th had "Salmon Pink," also 10 A 7, very slightly purer, but the "Salmon Pink" of SCCA 8th does not maintain this tint, being still purer and a little redder. The "Salmon" of F is 10 A 7 but slightly duller. The proposed standard BESA "Salmon" is unfortunately distinctly too red. Of paint samples, 10 A 7 is also an excellent average. It is therefore evident that 10 A 7 is the existing standard, under both the names Salmon and Salmon Pink. The addition of "Pink" in this term, however, is quite unnecessary. It is rather a sophisticated addition, in view of the very common use of *Salmon*, and might better be avoided. "Salmon" is one of those terms with which the use of the adjectives, Dark, Light, etc. are incongruous and illogical. For lighter and darker tones of this hue, there are plenty of special names.

Sand. In TCCA S23, "Sand" is darker than "Beach," and in the SCCA, "Sand" is lighter than "Beach." The SCCA standard is followed in this book.

Saxe Blue. This term appears in SCCA 7th for 36 I 6, and in SCCA 8th for 36 G 6+. The word *Saxe* is not English, but is adopted from French, where it means *Saxony* or *Saxon*. Saxony Blue was a universally used synonym for smalt, as early as 1550. Likewise, *Bleu de Saxe* has long been a French synonym for Prussian Blue. But, since 1753, *Saxon Blue* has been most familiar as a widely used name for indigo extract. Neither of the SCCA colors approach the three mentioned. Because of the inevitable confusion with the French *Bleu de Saxe*, as well as with the other old and familiar applications, it would be advisable for the term "Saxe Blue" to be discontinued as the name for a specific textile color. Even if the SCCA "Saxe Blue" were originally adopted from some European sample dyed with indigo extract, it would still be an improper name for a specific color sensation, since Saxon Blue is the name of a chemical substance only, a dye from which are produced all tones of blue, from light to dark.

Scarlet, Scarlet Red. This word appears in all the Romance and Teutonic languages, in various spelling, from at least the very beginning of the thirteenth century. It appears also in modern Slavic languages, and some others, such as Turkish, but in these it seems to be a modern adoption from a Western language. Its origin is obscure. A prevailing opinion is that it came from Persian *saqalat, siqalat, suglat*, a red cloth dyed with Kermes. The distinction between the Scarlet and Crimson Reds is that Scarlet contains an Orange tone and no Blue, while Crimson contains a Blue tone and no Orange. The scarlet dye made from the *kermes* insect (*Coccus ilicis*), which lives on a species of oak-tree growing in the southern parts of Asia and Europe, is the oldest recorded dyestuff, the *tola*, or *tolaschani*, of the Hebrew Scriptures, the *coccus* of the ancient Greeks and Romans. The insect remained in use as a dye source until the discovery in Mexico, about 1550, of a similar insect, the cochineal (*Coccus cacti*), which being, as a dye, stronger and more permanent, rapidly supplanted it. Cochineal appropriated the name Scarlet, which had originally belonged only to kermes, and the latter, to differentiate it, became known as Venetian Scarlet, while Cochineal was also called Dutch, Fire, and Goblin Scarlet. *Scarlet* varies within a very small range. It can hardly be rigidly confined to a specific hue, though a central tone may perhaps be chosen. The "Scarlet" of the SCCA, 2 L 9, is, however, not sufficiently orange in tone to be a true scarlet; while R's "Scarlet", 1 J 12, is rather too orange in tone. R has also a "Scarlet-Red" (1 L 11), but at least as early as 1590 the term Scarlet was felt to be specific in character, as indicating a special kind of Red. The term "Scarlet-Red" was as often used as the word "Scarlet" alone, in other languages as well as in English, and is still so used occasionally today. The idea behind the usage was correct; Scarlet *is* a Red, as much so as Crimson is; but each is a special kind of Red. R's insertion of a hyphen in his term "Scarlet-Red" does not serve to differentiate it from the old term "Scarlet Red," but his use of the hyphen, together with his application of "Scarlet-Red" to a specific color less orange in tone than his "Scarlet," implies that "Scarlet-Red" lies between the colors "Scarlet" and "Red," thus giving to "Red" a highly restricted and even specific meaning, contrary to universal usage from the most ancient times. The "Scarlet" produced with cochineal was slightly more orange in tone than the original "scarlet" produced with kermes. But today, the use of cochineal is almost as obsolete as is the use of kermes, and we have coal-tar dyes capable of producing any minute distinction of tone required. Hence, there is no reason why *Scarlet* should not be standardized as the color of the original "Scarlet," the color produced with kermes. Such a distinction would have, at least, the merit of a majestic reach of history behind it.

Sea Green. This term presents difficulties of standardization, since the sea, more than any other natural feature, shows so many different colors, such as under varying conditions of weather, etc. In addition, the sea offshore for some distance is a dull yellowish green, while in mid-ocean it has a bluer tone, a distinction implied in the ancient phrase, "the deep blue sea." It is this latter color which R presents under the name "Sea Green," 29 L 4 −, which would be better called "Sea Blue," a term which was used, in fact, long before R. The color of the ordinary "Sea Green," as is shown in innumerable samples and descriptions, is that seen offshore. For such Sea Greens, various authorities have as follows: TCCA S25, 26 B 11; O, 20 G 1; F, 22 B 7+; BESA, 19 K 6. The normal aspect of the sea, which alone ought to govern one in the selection of the color, would be that of a clear, sunny, summer day, a day when the sea presented a comparatively smooth surface. Of the above colors, those like TCCA, 26 B 11 could not possibly match the normal aspect of the sea under the above-mentioned conditions. The best match is that of BESA, 19 K 9 (See p. 13 Comparing Impressions). Paints put out by the paint industry of both England and America, in which the term "Sea Green" is widely used, are in close agreement with it, many specimens, in fact, matching 19 K 6 exactly.

Sea Moss. The "Index to the Color Names" of the TCCA contains the following note: "Through an error the same name was used for two different shades. When ordering, it is important to qualify the shade by the number and season card on which it appears." Both colors are shown herein, Sea Moss (*a*), S25, 22 L 1+, and Sea Moss (*b*), F26, 31 H 6.

Sepia. Sepia is an organic coloring matter obtained from the cuttlefish, the word *sepia* coming through Latin from Greek. Sepia had some use in ancient times as a writing ink, and in modern times has occasionally been tried as a pigment, but it never attained any popularity, as it is extremely fugitive. Paints sold under this name have practically always been imitations of the color by other, more permanent substances; today they are so without exception. The so-called "Sepia" colors, familiar in the rotogravure sections of newspapers and magazines, are produced by coal-tar preparations, and are too reddish in tone to be *sepia*. The use of the name in this field was adopted from photography, where the term *sepia* has long been applied to brown tones obtained in prints by chemical action. In both fields, the term "sepia" is merely a "fancier" name than that which should be used, which is "brown," since the colors in question are merely browns, and vary widely. R's "Sepia," on the other hand, is too yellowish. "Warm Sepia" and "Roman Sepia" are coal-tar preparations, the inventions of dealers in artists' paints; the names have no significance whatever and no relation to the genuine color.

Shell Pink. A term which is meaningless because of the great number of colors exhibited by the objects named. In consequence, the "Shell Pinks" of different authorities differ as widely as it is possible for colors to differ, and there is no possibility, of course, that any one of them can be established. In the shell, Nature reached her highest flights of artistry, going far beyond what she accomplished with flowers and birds. The wide variety of colors in flowers is largely due to man's cultivation of them, but the greatest genius of man has never yet produced anything approaching the marvellous beauty of color and form found in shells. They would provide a splendid source of color terms, if used with specific names, a source as yet untouched. TCCA S26 had a "Sea Shell," a pretty name, but without any specific significance as a color term. Most museums have collections of shells which can be referred to in order to secure accurate matches for colors under specific names. It is considered unwise to record here, any of the so-called "Shell pinks" which have been used, since to do so would be not only meaningless but misleading as well. There is no conceivable tone of *pink* which shells do not show, and there is no one of these which Nature has shown any preference for. The term "Shell Pink" as describing a specific color sensation should be immediately abandoned.

Shrimp, Prawn, Crevette. The delectable little crustacean served as the suggestion for a color and name as early as 1839, when "Prawn Pink" was used. The color, 1 E 10, is that of the shell of the shrimp when boiled. "Shrimp" and "Prawn" are English names; "Crevette" is French. All are in use as color terms, both alone, and combined with the generic terms "Pink" and "Red"; but the color to which all refer is the single one, 1 E 10—or should be, for there is little variation in the color of the boiled shrimp. There is also no difference between the *shrimp* and the *prawn*. It is sometimes said the "prawn" refers to the larger sized fish, and "shrimp" to the smaller; but size here is merely relative, and the difference is exceedingly small, if indeed even perceptible and not simply a matter of the imagination. Even if there is such a distinction in the fish, it does not follow into the colors, for tests have proven that both the smallest size of shrimp obtainable, and the largest, show exactly the same color when boiled. The real truth concerning these names is that "prawn" is generally used in England, and is hardly known in America, where "shrimp" is the customary word. Some of the colors exhibited under these names have been so extraordinary that they actually become a matter of interest and are worth recording here: TCCA S21, "Shrimp," 1 B 12; F, "Shrimp Pink," 3 G 7; F, "Crevette," 2 H 7+. R has "Shrimp Pink," 1 D 8—on the general order, but too pale. O would appear to have the correct match.

Siena. This term was used in the textile field as early as 1874, and appears again in TCCA S16. It is a term which can only cause confusion, because of its similarity to the earth pigment, sienna. The TCCA color is a deep, reddish brown, of the order of, but not a correct match for, Burnt Sienna. The form of the word here used, "Siena," is the Italian spelling of the name of the city in Italy. Had TCCA applied the name "Siena" to a color completely different from the pigment "sienna," such as a blue, or a purple, the claim might perhaps be accepted that "Siena" had no relation to "Sienna," and commemorated only the name of that city. But the choice of a color so like the pigment unfortunately renders any such claim invalid. The term *sienna* (which is the English form of spelling only; other languages have *siena*) as applied to the pigment has no color significance, and never was intended to have such significance; it refers only to the particular substance, and that substance either when used to produce a deep color, or when lightened with white, is still "sienna."

Silver, Silver Grey, Old Silver. The metal called silver, like gold and some other metals, takes on a slight change of color with age (apart from "tarnish"), known as "patina," and becomes less bluish. Silver, in the polished form in which it reaches the public, shows little hue. When employed in its most highly polished state, as in a well made mirror, it exhibits no hue whatever. On the other hand, everyone is familiar with the cheap mirror, which quickly takes on a rusty tone, due mainly to "tarnish," or oxidation. In fabricated form, with much less polish, silver does exhibit a hue, which, with some difficulty, may be matched in a reasonably close manner. *New silver* is 37 A 2. *Old Silver* is 38 A 1. A study of the colors "Silver" and "Silver Grey," exhibited in textiles and paints of innumerable samples, old and new, shows that "Silver Grey" is identical with "Silver," as a color name, and also that both the above-described conditions of the metal have been used as sources in matching, without recognition of the distinction. For example, the *Silver Grey* of F is 37 A 2 (new silver). The *Silver* of SCCA is 38 A 1—(old silver). The use or omission of the generic term "grey," however, has no significance, and cannot have. "Silver," as a color term, dates from 1481; "Silver Grey" from 1607. They are used, naturally, quite interchangeably. O exhibits both tones of color, in the conditions described, as here recorded. In consequence, it seems necessary, in order to indicate the exact color, to use both the color terms *Silver* (or *New Silver*), and *Old Silver*, just as in the case of *Gold* and *Old Gold*. In both instances, the preferable, and quite unmistakable, terms would be *New Silver*, and *New Gold*, rather than "Silver" and "Gold," which are indeterminate in meaning.

Sky Blue. The color of the sky shows a variety of hues, a changeability second only to that of the sea. The colors of tropical and semitropical skies are deeper than those of more northern (or more southern) latitudes, and, in the temperate zones, summer skies are deeper than winter. The amount of water-vapor in the air, and of dust in the air over cities, changes the color materially. The angle of view, as regards the sun, has its influence, also. The time of day brings its changes, too, early morning and late afternoon throwing strong violet and purplish tones into the lower portions, and greener tones into the upper sky. Excluding these changes, and considering the sky only during midday, in midsummer, on a clear day, there is yet a wide difference between the blue of the horizon and that of the zenith, the color altering with almost every degree of altitude. This can readily be tested by holding a piece of cardboard with an inch-square hole in it about a foot from the eyes, and rapidly shifting it up and down a few degrees at a time, trying various regions in the sky. The result will surprise most of those who try it. It will also serve to show that the term *Sky Blue* must be of the vaguest application, unless the controlling conditions are *understood* and specified; likewise that standardization would be impossible. It should also be evident that any averaging of color from a number of past or current samples cannot be made use of, even were the colors found in practise sufficiently good matches for such purpose—which they are decidedly not—since one sample may match the horizon, and another the zenith, and both be "sky blue." Accordingly, the following comparisons were carefully made, all within fifty miles of New York City. They were independently repeated on a number of different days. The conditions under which the comparisons were made are: atmosphere free from apparent dust and water-vapor, in other words, a clear, sunny day between the hours of 10 A.M. and 3 P.M. in the summer. The results will be: *horizon* at 5° or lower of altitude, 25 A 4; *lower sky* at 10°, 33 G 4; at 30° which might be termed *middle sky*, 33 E 6; *zenith*, 34 A 7. (See p. 13 Comparing Impressions.) *Horizon Blue,* 25 A 4, might more properly be called "Horizon Green," but the association of "blue" and "sky" is so strong, that "Horizon Blue" has become a fixture in the nomenclature of colors, and may as well be accepted. The "Horizon Blue" of SCCA 7th is 36 A 3, and was dropped from the SCCA 8th. It was correct only for a very cloudy, grey day. The "Horizon Blue" of O is very slightly yellower and greyer than 25 A 4, a color seen later in the afternoon, when the sun, towards setting, begins to lend its refracted warmth to the sky. The term "Horizon Blue" was made famous during the World War in certain French uniforms; it was not a true "horizon" blue, however, but a bluer and deeper color, and nearer to the color next discussed. *Lower Sky*. The color of the sky in the lower regions, around 10° of altitude, 33 G 4, had best not be made use of, for lack of a suitable discriminating term. TCCA S22 had a color called "Sky," approximately 34 G 4, but "Sky" is merely synonymous with "Sky Blue" and has been used as such since 1586, at least; the color-term "Sky" was used before the term "Sky Blue," which first appears about 1728. By *Middle Sky* is meant that region between 20° and 35° of altitude, the highest sky ordinarily perceived by human beings. To see the sky above this point requires an extreme bending back of the head, and consequently this part of the sky is not usually seen in daily living. (Under the term "Bleu de Ciel," O has, for the locality of Paris in summertime, four tones, from 26 C 1 at the horizon to 27 E 2 at the zenith, but these colors show no change of hue. An impossible condition. 26 C 1 at the horizon may be correct for certain states of weather, but 27 E 2 at the zenith is difficult to reconcile, except under the most extraordinary circumstances.) The "Sky Blue" of TCCS Hosiery Standard Card, 27 B 2, is not a proper "sky" blue at all, but may be a variety of "horizon" blue, of a kind to be observed on a very hazy day. The "Sky Blue" of F is 35 D 4, obviously with the atmosphere thick with haze and dust. R's "Sky Blue" supports 33 E 6, being the same but just perceptibly purer—a trifle too much so for nature. If both the term and the color *Sky Blue* are to be standardized, as seems necessary because of the universal use of them, it is evident that only the aspect of the sky under normal conditions can logically govern, and under normal conditions that color would appear to be 33 E 6. When the sky contains some clouds, especially those woolly cumulous shapes which take on so brilliant a white on fine summer days, the contrast of cloud and sky makes the blue seem deeper than 33 E 6; but a cardboard shield to hide the clouds will eliminate the contrast. This standard *Sky Blue*, 33 E 6, is for the North Temperate Zone, where the greatest concentration of population lies, with a need for such standardization. For tropical and semitropical regions a local standard should be established, and might be called "Tropical Sky Blue." The same should be done for countries of the Mediterranean and the Orient, with those names appended. (O states that the term "Orient Blue" recalled the color of the sky in the Orient. This statement would seem an error—one of the very few in O. The name was given to indicate the color of the blue in chinaware brought from the Orient. To prevent mistakes in the future, the term "Oriental Sky Blue" had best be used.) The *zenith* is the part of the sky directly overhead, a region rarely observed. Its color is not usually a subject for critical conjecture. This "Zenith Blue" appears to be 34 A 7. TCCA S19 had a color, 34 L 7, called "Zenith," but that is merely a textile fancy, and has no relation to the true color of the zenith. F had a "Zenith," 35 C 2, as difficult to reconcile as TCCA's 34 L 7, doubtless also a textile color. There has been a play also on words of similar meaning for various blues. For example, TCCA S28 had a "Blue Skies" for 35 B 6; TCCA F22 a "Celestial" for 35 I 8; TCCA S28W a "Celeste" for 36 B 7, though *celeste* is merely the French for *celestial*. F had "Celestial Blue" for 35 D 3. TCCA F22 had a "Firmament" for 36 D 7. A British mixed paint has "Firmanent Blue" for 35 H 4. Ever since the sixteenth century "cerulean" (from Latin *caeruleus*, blue, itself from *caelum*, sky) has been a literary term for "sky blue." In 1859, the name cerulean was given to a pigment, but is recognized among artists as indicating a certain chemical coloring matter. (See also note on Azure.) Such terms are nothing but synonyms for *Sky Blue*. They are strictly poetic terms, but their dignity as such does not provide a sanction for a change of color, or confer any validity on the colors mentioned. The use of all such should be abandoned, if the term and color *Sky Blue*—an item as necessary in the category of language as bread in the category of food—is to have any meaning at all.

Sky Green, Lumière Green. Vert Lumière, adopted by R as Lumière Green, appears in O, where its source is stated to be the color industry. Lumière is the French for *light*, visible radiant energy. It is Anglicized in O as "Sky Green." It is not an impossible color for the sky, as such a color may be seen sometimes in the west at sundown on an exceptionally clear day, when the sun's rays are very highly refracted. (See †Lumière Gr.)

Sky Grey. R has a "Sky Grey," 33 C 3+. If "Sky Grey" means anything, it would seem to mean the color of the sky on an overcast day when there is little or no rain. On such a day there are a few small rain clouds of slightly darker color constantly traveling across the lower sky, but in general the whole sky is remarkably even in tone, matching 34 B 2, except at the horizon, which matches 34 B 1. (See p. 13 Comparing Impressions.) When compared against such a sky, R's "Sky Grey" is too perceptibly clear and bluish. As a matter of fact, even apart from the above-described condition, where the tone is very even, 34 B 2 will always be found to be the general *grey* color in clouds, varied in gradation by the shadowing of their forms.

Slate Grey. R has a "Slate-Grey," but it is merely slightly lighter than his "Slate Color," 47 A 6+, a color of perceptible violet tone, on which all authorities agree, for "Slate." The proper "Slate Grey" is that in O, 14 A 2+. This color is given therein the name *Ardoise* (slate), Englished as Slate Grey—one of the very few cases where O strays fron careful accuracy, due to a literal use of words. In this case, O states that the color is the one most prevalent in roofing-slates (in France, of course), but in another place (Plate 234) he notes that *Ardoise* shows generally a violet tone. The *Ardoise* in F matches the English "Slate" color exactly. In the Index of O, the French form of Slate Grey is correctly given as *Gris Ardoise,* and it is unfortunate that *Ardoise* alone appears on the color plate.

Slate-Violet. O contains a "Slate-Violet," 6 I 8, a name in use both in English and in French (Fr., *Violet ardoisé*). R used O as one of his main sources of names (R, p. 11), and adopted the name, but saw fit to apply it to a series of colors different from the original. R presents *Slate-Violet* (1), and *Dark Slate-Violet* (1), in one scale, but *Slate Violet* (2) and *Dark Slate-Violet* (2), in another. Then he inserts a *Deep Slate-Violet* (without any qualifying number) *between* the two members of the latter pair, but places a *Dusky Slate-Violet after* the first-mentioned pair. It is almost incredible that anyone could indulge in so illogical a practise.

Smalt. The substance from which the color-name is taken is a powdered blue glass, the color of which is due to oxide of cobalt. Formerly in very wide demand, its use is now obsolete, except for a restricted employment in glass painting, enameling, and ceramics. As produced by different makers, the color varies; that shown herein, 43 D 11, is the brightest and bluest found. It also runs paler and redder, and paler and greyer.

Smoke. This term, as a color name, presents peculiar difficulties in any attempt at standardization. In the first place, there may be fumes present from sources other than the normal smoke producing wood or coal material, which may, in addition, be dry, damp, or wet. But eliminating that factor, and considering the smoke to be made up only of the neutral gray carbon particles, the apparent *value* of the smoke color will be materially affected by the background, which may be dark or light. Even more important, in its influence on the hue, is the quality of opalescence which smoke possesses, in common with many other substances, gaseous, liquid, and solid. Opalescence is the name of that phenomemon by which minute particles reflect more strongly the short wave-lengths of light, and transmit more strongly the long wave-lengths. Accordingly, against a dark background, there being more reflected than transmitted light, smoke appears bluish; and against a light background, vice versa, smoke appears brownish. The terms Smoke Blue, Smoke Brown, Smoke Grey, and Smoke Yellow, have all been use of, unconsciously perhaps, as indicating these different colors. (The form *Smoke,* without a generic term attached, has also been used, of course. For example, the SCCA "Smoke" is a real *Smoke Brown,* 16 A 2. The form *Smoke,* therefore, is quite indefinite. As indexed in this Dictionary, smoke colors are not matches from actual nature, but represent average colors in commercial use for paints, textiles, etc. The practise of using names with generic terms should always be followed.

Snow White. Under the name "Snow White," O shows a white with a strong yellowish tinge, the origin being described as the color of snow when observed under a diffuse light. The term *Snow White,* however, is traditionally and universally used to describe the purest, whitest white, and from antiquity has been a fixture in both colloquial and literary language. As so used, however, it is a term reserved for rhetorical emphasis only, as in point of fact, snow possesses, not only in diffuse light, but in direct sunlight as well, a myriad of hues. The particular hue depends, of course, on surrounding conditions of landscape, type of sky, time of day, angle of vision, slope of ground, variety of snow, etc. Although the average person, untrained in the exact detection of color, does not observe these hues, being content to take "snow" simply as "white," he can immediately distinguish them when pointed out. Snow, when looked at close at hand, however, appears pure, colorless white. O's special color is only one of many which are characteristic of snow and is neither an average nor a general tone.

Snuff Brown. A fairly old color name, in use since the seventeenth century, but today, naturally, rather out of mode. Snuff, the substance, shows variations of color, according to strength and grade. It is therefore impossible to apply the name "Snuff" to a specific color sensation, and the term must be taken as referring generally to a dull, indefinite brown. R's "Snuff Brown" is 15 C 8−; F's "Snuff" is 15 L 11; TCCA F20 "Snuff" is 15 A 12+. Since snuff is today so little used that its color is generally unfamiliar, and as its name as a color term is quite superfluous, in view of the number of similar terms we already have, it might better be dropped.

Steel Blue. TCCA F26 had a color, 38 H 8, called "Steel Blue," although "Steel" was already in SCCA. Exactly the same conclusions apply here as with the name "Chinese Blue" (see note). "Steel Blue" is an old and thoroughly established name for a grade of Prussian Blue.

Stil de grain. This term, the derivation of which is unknown, has occasionally and erroneously been applied to a lake made from the bark of various species of the North American oak (*Quercus tinctoria, Qu. Citrina,* etc.), known in commerce as "quercitron bark." Genuine Stil de grain, also known as Dutch, English, and Italian Pink, was made from buckthorn berries, (from various species of *Rhamnus*). A lake pigment made from quercitron bark, and usually called Quercitron Lake, having proved to be a somewhat more permanent color, it was sometimes sold under the name *Stil de grain,* which correctly belongs only to the Lake made from the buckthorn. Both are obsolete, and pigments under these names today are simply coal-tar preparations.

Sulphur Yellow. As taken from the mines, sulphur is contaminated with gypsum, limestone, etc., by which its color is varied. (It may even be of an orange-red color, as is the case in certain islands of the Mediterranean, due to the presence of selenium and arsenic sulphide in the ore.) After a first rough purification at the mines, the mineral is known as *crude sulphur.* Today it is highly refined, and produced either in a powdered form, known as Flowers of Sulphur, or in compact form, known as Roll sulphur. The characteristic color of sulphur is best and most uniformly shown in the Roll Sulphur, which, as matched from the actual substance, is 10 J 1, a color also matched in O. The "Sulphur Yellow" of former days must have varied somewhat in color, as did the color of the crude sulphur then in use, the variations being towards greenish or greyish. Syme, 1814, gives three yellows, which he describes as matching different grades of sulphur, the color he names "Sulphur Yellow" being 12 K 2−. R has 10 F 1—next to impossible as a sulphur yellow, and certainly undesirable as a standard. A paint or textile of a yellow which distinctly inclines toward an orange, is occasionally seen under this name, but it may be said that the characteristic and essential feature of Sulphur Yellow is the entire absence of any orange tone in it. Average practise correctly keeps to 10 J 1.

Sunflower. TCCA S24 had a color by this name, 11 L 9. There is no sunflower with such a color. While horticulturists have developed a few varieties of the double and hybrid sunflower, whose color departs from that of the ordinary sunflower, the term "Sunflower" can refer only to the ancient and universally known graden variety (*Helianthus annus*). The color of this is 9 L 4, but slightly purer; the extreme base of the petals is 9 L 6, the tips 10 L 3. F has 10 K 6.

Taupe. This color term originated in France in the early nineteenth century, and was immediately adopted into English. The word means *mole*, the name of the little burrowing animal. Although the color term had been extremely popular and in widespread use for a long time, the entirely unnecessary variations *Moleskin, Mole*, and *Mole Grey* were introduced about 1900. No samples from that period could be found by the authors, and it is possible that the three variations referred to the same color as *Taupe.* The TCCA, however, resurrected them, for 8 C 9, 8 A 7, and 8 A 7−, respectively. Such a play on words is obviously meaningless, and confusing, especially in view of the fact that these TCCA colors are misnomers and have no relation to the actual color of the mole. (*Mole* and *Moleskin* appeared on the same TCCA Card!) The mole is found in all parts of the earth, and its color certainly varies, but an examination and comparison of museum specimens from various regions, including America and France, proved that in no case do the colors approach those mentioned. Under the name "Taupe Brown" R has given a color similar to 56 A 6, which represents a considerable departure from any color a mole might possess. The TCCA "Taupe" is a correct match for the average actual color of the French mole, which, in view of the origin of the color term, should be recognized as the standard source.

Tawny. This word is a phonetic English spelling of the French word *tanné*, tan-colored. It was adopted in the fourteenth century, and was spelled also *tenne, tenny.* It was a term in very wide use. Later, for a period, it came to be used almost entirely to denote the color of certain animals, like the lion, and so came to refer to a duller color than the original *tan.* (See note on Leather.) Its derivation is largely unknown to most people, who usually associate it only with the lion.

Tea Rose. This was a color name as early as 1884, and was unfortunately adopted in SCCA for the color 1 C 9. *Tea rose,* as all the world knows, is not the name of a single variety of rose but embraces many varieties, all called "tea roses." While the colors of these roses are mainly of yellowish tone, the range of such tones is very great, and there are even brilliant red tea roses, such as "Princess Ghika." The use of this name as referring to a specific color should be abandoned. (See note on Rose.)

Terra Brown. This term has been used by a few makers of mixed paints; the colors to which it is applied vary widely. The term was unwisely chosen, and is provocative of error, since *terra* is a word of very ancient usage in the nomenclature of pigments. It is a very firmly established word in several different terms, any of which may easily be confused with the above (see Index for list). Since the name as here used is merely a coined one designed for different mixed colors (which cannot be reduced to an average) and has no special meaning (*terra* is merely the Italian for "earth"), it is deemed unnecessary to record here any example of "Terra Brown."

Terra Columbiana. A name mentioned in certain colonial documents as that given to a certain natural deposit of ochre suitable for the manufacture of paint. So far as can be found, the deposit was never worked at that time, and the name never gained currency.

Terra Cotta. It is unfortunate that this term was ever used as a color name. Terra Cotta is from the Italian, and means "baked clay." The color of "baked clay" however, is quite variable and there is no single tone which may be pointed to as being its unvarying color. Since the name is definitely established, however, an attempt at defining the best practise must be made. (At the present time, as much as in the past, *Terra Cotta* means everything and nothing.) There is one attempt at standardization which may immediately be eliminated, and that is the SCCA "Terra Cotta," 6 K 12. While the colors of terra cotta vary widely, they do not include any such color as this. The piece of terra cotta from which this was matched (if it was matched) must have been one accidently overbaked in the kiln, or, more likely, one covered with an engobe containing manganese oxide. This dark color departs completely from the conception of "Terra Cotta" which has prevailed since its first use at about 1880. Another terra cotta which may be eliminated is R's "Terra Cotta," 4 E 10−, a color that goes to the other extreme of being too pale and greyish. Both the term and the color are by far most widely employed in the paint industry. Their usage in this industry should, therefore, govern the general use of the term elsewhere. In the paint industry there is at least a tendency observable towards a definite tone. The BESA standard Terra Cotta is accordingly followed herein, 4 D 12, a good average of general practise.

Terra Verte. A very ancient pigment. As its name, *green earth*, signifies, it is a substance found in nature, a clay colored with green hydrated oxide of iron. It is found all over the earth, and the color, as with all earth pigments, varies considerably. Samples from different manufacturers vary so widely, in fact, that it is impossible even to strike an average among them. Though Terra Verte is usually defined by writers as a bluish green, a majority of the colors on the market are certainly quite yellowish. (Jennings, 1926, describes a mixed-paint color, "Verdant Grey," composed of 2 parts Zinc White, 1 part Terra Verte. As it is not known what shade of green the particular terra verte which Jennings used had, it is manifestly impossible to reproduce his color, as must be the case with any color in which terra verte of unknown color is an ingredient.)

Thistle. The TCCA has issued three different but somewhat similar colors under the names *Thistle*, *Thistle Bloom*, and *Thistletuft*. It would be interesting to hear an attempt at an explanation of the differences in color which such terms (almost identical in meaning) are supposed to indicate.

Tobacco. An old term, in use since 1789, and doubtless before. There is no possible way by which a color could be standardized under this name. There are many kinds of tobacco, produced in many different strengths and grades, and their colors vary widely. Hence, the color-term "Tobacco" or "Tobacco Brown" is quite meaningless, except as referring generally to a dull indefinite brown. SCCA 7th had 8 J 12−; F had 15 L 11; O has 7 E 10 (but states that this is the ordinary color of the textile by this name). A British mixed paint has the name "Tobac" for a brown of this class, but "Tobac" is doubtless an erroneous spelling of French *tabac*, which means "snuff" as well as "tobacco." ("Tobac" may also have been a shortened form of "tobacco.")

Tomato Red. TCCA S21 had a color "Tomatoe" (*sic*), 2 H 12, but which is certainly too pure in tone to match any natural tomato, as checked against a number of different varieties. Ordinary Tomato Red, which varies little in ripe tomatoes themselves, is 3 I 12, by careful match, a color which O also found. (There is a yellow variety of the tomato whose color may also be recorded, 10 L 5+.)

Tyrian Purple. One of the most famous colors in history, Tyrian Purple has been a topic of discussion from the times of the ancient Greeks to the present. From ancient times, various theories have been advanced concerning it, and since the time of Pliny, it has been usual to attribute it, following that writer, to a substance taken from certain sea-snails, for example, *Murex brandaris* or *Purpura haemastoma*. Of recent years, these organic substances have been analyzed, (and have even been made synthetically), but the color produced from them has been of a rather poor and dull tone, and can hardly be accepted as reproducing a color which as a pigment was literally worth its weight in gold; which was praised with unbounded enthusiasm in Greece at a time when her incomparable artistic development was at its height; which symbolized all the magnificence of Imperial Rome. Whether or not the color was in truth obtained from sea-snails, it is probable that today we have not yet recovered the exact method of preparing or using it. Of course ancient writers other than Pliny mentioned this theory of the origin of Tyrian Purple. Five centuries before Pliny there was, for example, Herodotus, who makes mention of its origin. But the manner in which the reference was made leads one who analyzes his style to think that Herodotus did not himself believe what he wrote about Tyrian Purple. Nor is Pliny above the same suspicion, as those familiar with his works know. (The name "Tyrian Purple" was used in O, where also the term "Tyrian Rose" appears as a synonym for 51 L 2; R adopted the name "Tyrian Rose," but, altered the color in this case to 3 G 6. TCCA S26 had a "Tyrian Violet" for 44 K 5. And the name "Tyrian" has also formed part of other color names. All such colors, of course, are without any standing whatever; they are merely arbitrary selections of today, to which the names have been attached without the slightest authority. While noted herein, they are of a misleading character and should not be made use of.)

Umber. The umbers, raw and burnt, in their full strength are quite dark, and only show their characteristic colors when reduced with white. Raw umber, especially, is much used in house painting, for toning other colors, etc. The colors of the umbers vary according to the source. Those indexed herein are average colors reduced with white.

Venet. A color-term in use in the fifteenth century. A writer of 1425 speaks of "venet, that is, water-colour." B. Holyday, 1661, in his translation of Juvenal, has the passage: "Vegetius . . . . says that ships which are sent out as spies should have their sails of the venet colour, that they may not be discovered by the enemy." Which shows that the art of camouflage is not a new thing after all. *Venet* is merely the English shortened form of *venetus*, a Medieval Latin word, meaning Venice Blue, which was a synonym of Turquoise Blue. The Turquoise Blue of that time had not, however, the brilliant hue of the Modern Turquoise Blue produced by coal-tar dyes.

Verbena, Vervain. TCCA S21 had a "Verbena," 52 A 8, and TCCA S22, a "Vervain," 42 B 6. The two words are merely linguistic couplets, *Verbena* being taken into English directly from Latin, while *Vervain* had the same Latin origin but came through Old French *verveine*. Vervain is the Anglicized spelling of *verveine*. Both the terms *verbena* and *vervain* are very commonly used in English, and refer to the same flower, as does also the modern French *verveine*. It would appear distinctly inadvisable to use such old and extremely common synonyms for two different colors.

Verdigris, Vert-de-gris. From Old French *Vertegrez*, literally, Greek Green. The pigment has been made from ancient times by corroding copper with wine-lees, or vinegar. It also forms naturally on copper surfaces exposed to moisture. Its color, as given in O, is 28 B 7. Other authorities have: R, 27 J 9; F, 30 G 10+; TCCA S27, 30 J 1, none of which would seem correct. Verdigris appears in two forms, blue, a dibasic acetate of copper; and green, a mixture of dibasic and tribasic acetates of copper. The TCCA color, 30 J 1, is a blue, but not the real blue verdigris. This form is rarely seen, and the name from ancient times down (Greek, *Ios;* Latin, *Aerugo*) has always meant the green variety. The use of verdigris as a painter's color has long been obsolete. Writers on structural painting aver that verdigris is employed sometimes for glazing, but even that use is very rare, and it only serves in an occasional capacity today as a non-fouling paint for ships' bottoms and a protection against the ravages of white ants, etc. in the tropics. An old synonym for Verdigris is "Montpellier Green," from the name of the French city, which was a center for the color trade in the Middle Ages and during the Renaissance. R has 27 J 9 for Verdigris, but 29 F 6 for *Montpellier Green!*

Vermilion, Imitation. Some imitation Vermilions are Chrome Red, or chromate of lead. Others are made by precipitating eosine, alisarine, Para Red, etc. on red or orange lead, barytes, or a mixture of these. They are all substitutes for the more expensive genuine vermilion. The colors vary.

Veronese. This name has been used for two entirely different pigments, and especial care is needed not to mistake them for each other. *Paul Veronese Green* is *Emerald Green*, a cupric aceto-arsenate. *Veronese Green*, or *French Veronese Green*, is transparent oxide of chromium, which is also called *emeraude*. *Emeraude*, however is the French word for *emerald*, and Emerald Green is usually called in French *Vert Paul Veronese*, though sometimes, to shorten the term, the *Paul* is left out. This practise is also a serious error and the cause of misunderstanding. *Verona Green* is another name for Terre Verte.

Vinous, Vinaceous. These words are of Latin formation but did not exist as color names in the Latin language. They meant, as used in Latin, "pertaining to wine," and were used in several senses, but never as indicating the color of wine. There is no color term in Latin corresponding to the English "Wine." As color names, Vinaceous dates from the seventeenth century, Vinous from the nineteenth. R gave the name Vinaceous to 3 B 3. As color terms these words can mean only *wine color*, and as such they share all the indefiniteness of that term. How indefinite any such term must be is well exemplified in this color 3 B 3 against some of those recorded for "Wine." (See note on Wine.)

Viridine Green. The earliest record of this term as the name of a color-sensation seems to be in Warhurst, 1899, who used it as a synonym for Emerald. O also used the term, followed by R, for 17 I 6. O gives, as the English name for this color, "Viridian Green." This is a mistake, for viridian is transparent oxide of chromium. The term *Viridene*, long obsolete, had a brief life in England as a synonym for the true Viridian, which perhaps caused the error. In 1878, a green coal-tar dye under the name of Viridene was introduced, but was not much used. F has a Veridine Green, 26 C 29, possibly a misspelling or secondary spelling of Viridine.

Vivid Green. The definition of the word *vivid*, as given by the dictionaries, is: "Having an appearance of vigorous life; intense; said of colors having intense luminosity." "Vivid," in other words, is merely a synonym for brilliant and bright, and may, like them, be applied to all colors. One may speak of "*a vivid green*," but not of "*Vivid Green.*" It may therefore be considered as improper to apply the term as the name for a specific color, as R did.

Walnut, Walnut Brown. These terms, originally, and always properly, refer to the color of the shell of the walnut, for which a good average, as matched from a large number of specimens, is 12 E 6, which is also the average of general practice. This is the English walnut (*Juglans regia*), the common edible walnut. This color, 12 E 6, is that of the British-grown nut. The English walnut grown in the United States (originally from imported stock) has developed a lighter color, averaging 11 E 6. (Its flavor also, is "lighter," and cannot be compared with that of the British nut.) The black walnut (*Juglans nigra*) is also edible, but the flavor is strong and rank, and the nut is little used, except for cooking, to a small degree. Besides, the supply is very small, as the craze for black walnut furniture during the Victorian era nearly brought about the extermination of the tree. The color of the shell of the black walnut has never been used as the source of "Walnut" color. "Walnut," wherever English is spoken, means always the English walnut, and "Walnut," as a color term, has referred to the color of the shell of this species since at least 1654. When the nut of the *Juglans nigra* is intended, the term "black walnut" is always used. The term "Walnut" has unfortunately been used also to refer to the color of the wood, as seen in furniture, since colors are seen on the market which can only be supposed to refer to this source. This is especially so in the case of woodstains and varnishes. The demand for black walnut for gunstocks during the World War inspired an intensive search for the tree, and leveled the few remaining survivors. Even the stumps of trees cut down a generation ago were regarded as prizes, and as being worth many times the original value of the whole tree. The only black walnuts in America today are those hidden away in orchards or guarded as specimens, with perhaps a few more which may have escaped the search. Granting the necessity for the stains mentioned, however, the application of the term "Walnut" to the color of the wood should be considered as a highly specialized use, applicable only in the paint industry, and for this special purpose. It is decidedly wrong to carry the color of the wood under the name "Walnut" into general use, for a textile name, etc. There is an example of such use in R, who has "Walnut Brown" for 6 C 10+. This might represent one tone of walnut wood, but *Walnut Brown* is an old synonym for *Walnut*. In consequence the word *brown* when added, does not refer to the color of the wood but applies only to the color of the nut. The use of these wood colors under the term "Walnut" or "Walnut Brown" is quite modern. Throughout most of its life the term "Walnut" has always signified, and should always be used to signify, the color of the shell, 12 E 6. It should be noted, also, that as a matter of fact, the colors shown in genuine walnut wood, as found in furniture, differ in not the slightest respect from those in mahogany, and exactly the same range is found. The only difference between the two woods is possibly in the grain, and even here the two woods are distinguishable only to the expert. In addition, the colors range *so widely*, in both walnut and mahogany, that in truth the names *walnut* and *mahogany* are absolutely meaningless as color terms, and should be avoided as references to specific colors or as implying anything but the most vague indication. This applies only, of course, to the use of "walnut" and "mahogany" as color-terms descriptive of the woods of those names.

Wedgwood Blue. A rather popular term, which demonstrates that those, generally speaking, who bestow the name on textiles, paints, or color systems, have not the slightest conception of what "Wedgwood" is. For the colors which are shown under this name are such as no person who had ever seen a piece of Wedgwood would ever possibly call by that name. As a matter of fact, Josiah Wedgwood produced two different "Wedgwood blues" in his marvelous ware—a dark blue, 45 G 11, and a light blue, 37 B 7. These colors were matched with the greatest care from examples in the Metropolitan Museum of Art. In either group, the variation in color is but slight. For these colors, the use of the terms "Light Wedgwood Blue" and "Dark Wedgwood Blue" is necessary, and present a case where the use of the adjectives *light* and *dark* is permissible in color names, since the origins are colors of specific value. It is needless to record any of the colors which have been used under the names, since the application is in nearly every instance to colors quite far removed.

Wedgwood Green, Wedgwood Grey. Terms which were first used, or first recorded, as general color names, in Jennings. The green genuine Wedgwood ware varies slightly more in range than the two blues do, though it is still small. The average tone, matched from museum specimens, is 22 F 3. Under Wedgwood Grey, Jennings describes a color about 22 D 1. If Wedgwood produced such a color in his ware, it is rare, and the authors are not familiar with it. Wedgwood used a pale greyed purple, 45 B 2, in some of his medallions, with superb effect.

Wine. In view of the great number of wines, hardly any two of which have the same color, this word, as a color term, is absolutely without meaning. Since the term has been in use in English since before 1700 however, it may be examined as to usage and probable derivation. In the United States, in other days, the term "wine" frequently meant champagne, certainly so in sporting circles. No one, however, if asked, would have pointed to the color of champagne as being "wine color." Wine Color is primarily a British term. Some people hold that port wine, the "national" wine of England was the source of this color term, and many of the so-called "Wine" colors seen, undoubtedly reflect this idea. But "Wine" cannot refer to the color of port, for the following reason: There has been a mistaken idea (due to the erroneous statements in Croft's "Treatise on the Wines of Portugal," which were copied without investigation by later writers) that port wine was introduced into England by the Treaty of Methuen in 1703, but the fact is that port wine was not even invented until 1727. Yet "Wine," "Wine Red," and "Wine Color" were synonymous color terms in use long before port wine was in existence. Prior to 1703, claret was the wine that was most in use in England. In those days, "wine" meant *claret*, in ordinary parlance. Another important point is the fact *Claret* was in use as a color term from the early sixteenth century, whereas *Wine* came into use later, at the beginning of the eighteenth, so far as the records show (in spoken language doubtless before). As names for colors, these terms parallel the usage as names for wine. Only with the name of a particular wine in common use as a color name could the generic term *Wine* have any exact meaning. It must otherwise be a term of most indefinite application, and no authority could restrict it to an exact color. Even an *average* drawn from the widest limits obviously would be meaningless. But, granting that "wine" does properly mean "claret," its use as a color-name is entirely unnecessary and undesirable, since so many names of wines have been pressed into use as color names—names such as Claret, Champagne, Sauterne, Port, Burgundy, etc., which provide excellent and fitting terms for specific color sensations. (TCCA S26 had a color name, "Old Wine," for 7 C 6. TCCA F28W had "Wine Red" for 8 C 6, different from TCCA "Wine," 47 L 7; but *Wine Red* has been in use for at least a century as a very common and widely used synonym for *Wine*. R in the 1886 edition had a "Wine Purple," 52 J 8. The foregoing remarks apply to all these as well. See also notes on Bordeaux and Vinaceous.)

Wistaria. R has "Wistaria Violet" for 41 E 8, and also a color of hardly perceptible difference, which he called "Wistaria Blue," a color no more a *blue* than the one called violet. To append the generic terms *blue* and *violet* to the same word, for colors so extremely close together as this, is deliberately to invite error. SCCA has "Wistaria", 47 H 8; F had 44 K 10, colors obviously much too dark.

Wood Brown. The term "Wood Brown" was first used in 1805 for the color 13 B 6. It does not refer to the wood of a tree, but to the mineral *asbestos*, which was then commonly called *mountain wood*, a term now obsolete. In the books of the period such as that of Syme, 1814, this point is explained. R adopted the name from Syme, but without explanation, and doubtless, the reference is today generally supposed to be to a tree, or its wood. The term "Wood Brown" was later in the century independently given to colors which did refer to the color of the wood of trees, such as in F, 15 A 12; and again in TCCA S18, as "Wood," 15 E 12. As with many other words, *wood* in this sense is generic and is without color significance unless the *kind of wood* is mentioned. Since today the names of various kinds of woods are in use as color names, this vague and indeterminate term is quite unnecessary, and it should be dropped. It has no place in the vocabulary of colors, either as referring to a mineral or to a wood.

Wood-pigeon Grey. An obsolete name, for which no samples are obtainable. The only two colors in the plumage of the bird which might be considered greys are on the back, 15 A 4, and the rump, 46 A 2. The latter is a wonderfully beautiful grey, but is not ordinarily visible to the observer.

Yale Blue. Some curious differences exist in present-day ideas of Yale Blue. TCCA 7th had 38 D 11, but the current eighth edition has 45 D 12! R has 33 F 7, but it would seem reasonably sure that Yale Blue was never that color! F has 44 D 12, and this, as a representative average, appears to be the only correct standard. (The offerings of some mixed paint manufacturers under this name are difficult to reconcile. One, indeed, has a pale grey-green, 28 J 4!)

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Alizarin †
1326 Alkanet ^{V} †
1326   *Alkanna*
1567   Orcanette, Orchanet
1646 *Alcanna* ^{V} (Henna) 6 J 12
1326 *Alkanna* (Alkanet)
1626 *Alkermes* ^{A} (Kermes) 1 L 12
1879 *Almond* ^{T} [*Pink*], *Almond Blossom* 2 D 7
1920 **ALMOND** ^{T} [Brown] † 13 B 6
1899 **ALMOND GREEN** ^{T} 30 E 6
1882 Aloes [green] 20 A 5
1879 *Aloes* [rose] ^{T} ?
1927 **ALOMA** ^{T} 13 C 7
1919 Alpine ^{T} 38 G 7
1925 Alpine Green ^{T} 31 C 9
1916 Aluminum ^{T} 45 A 1
1705 *Alyce, Couleur d'* ^{T} †
1690 Amaranth ^{T} 44 L 8
1905 Amaranth Pink ^{R} 49 D 8
1912 Amaranth Purple ^{R} 53 L 3
1874 Amaranthine (Amaranth) 44 L 8
1923 Amarna ^{T} 30 K 11
1918 Amaryllis ^{T} 5 I 5
1924 Amazon ^{T} 29 J 10
1500 Amber White (natural, undyed) 11 C 1
1892 Amber Brown (F + = 7 C 12) 13 K 12
1927 Amberglow ^{T} 12 H 10
1500 Amber [Yellow] † 10 J 3
1924 Ambrosia ^{T} 6 G 9
1918 Ambulance ^{T} 8 C 6
18 – *Amelie* ^{T} 8 H 5
1915 **AMERICAN BEAUTY** ^{T} 6 F 6
18— *American Blue* ^{P} (Prussian Bl)
1905 American Green 22 A 7
18— *American Vermilion* ^{P} (Imit. Ver.)
1572 **AMETHYST** [Violet] (R = 41 K 10) 45 J 8
1671 Amethystine (Amethyst)
1912 Amparo Blue ^{R} 33 A 10
1912 Amparo Purple ^{R} 41 I 7
1923 Amulet ^{T} 30 L 7
1892 *Anamite* ^{T} 14 B 3
1925 Anatolia ^{T} 7 L 3
1697 *Anatta* ^{V} (Annatto) 10 A 7
1927 Andorra ^{T} 8 L 4
1892 *Andorre* ^{T} 21 A 7
1912 Andover Green ^{R} 23 E 2
18— *Andrinople Berries* ^{V} (Persian Berries) 10 L 6
1892 Anemone ^{T} (F = 54 E 9) 43 F 3
1705 *Anemone Flesh* ^{T} ?
17— *Angel Red* ^{P} † (Colcothar) 7 L 11
1918 Annapolis ^{T} 40 C 6
1784 Annatto ^{V} 10 A 7
1697   *Anatta*
1753   *Annotto*
1682   *Arnotto*
  Orlean
1666   *Rocou*, Roucou
  Terra Orellana
1916 Antelope ^{T} 14 B 4
1839 Antimony Yellow ^{P} 10 J 6
1892 *Antique* ^{T} 14 L 8
1913 Antique Brass ^{M} 14 J 4
1912 Antique Brown ^{R} 14 K 11
1902 Antique Bronze 14 L 10
1928 Antique Fuchsia ^{T} + 43 K 7
1924 Antique Gold ^{T} 12 L 8
1912 Antique Green 31 E 8
1905 Antique Red 4 J 11
1926 Antique Ruby ^{T} + 6 L 6
172– Antwerp ^{P} Blue (reduced Prussian Bl) 36 L 8
171–   *Harlem Blue* ^{P}
171–   *Mineral Blue* ^{P}
1787 *Antwerp Brown* ^{P} (Asphaltum) 8 H 11
Antwerp Red ^{P} (Bole) 5 F 11
1922 Apache ^{T} + 7 E 12
1924 Aphrodite ^{T} 25 J 8
1705 Appleblossom [Pink] 4 I 3
1000 *Apple-fallow* 5 L 10
1648 **APPLE GREEN** † 19 J 6
1851 **APRICOT** (F = 10 A 8) 10 F 7
1927 **AQUAGREEN** ^{T} 18 B 7
1598 Aquamarine 35 I 3
1898 Arab [Brown] 14 B 12
1902 Arabian Brown – 14 A 11
1928 Arabian Red ^{T} + 7 L 6
1925 Arabesque ^{T} 2 D 11
1927 Araby ^{T} 4 G 10
1927 Aragon ^{T} 6 F 10
1920 Arbutus ^{T} 1 B 4
1928 Arcadian Green ^{T} 17 G 8
1483 *Archil* ^{V} (Orchil)
1920 Arctic ^{T} 32 L 2
1926 Arctic Blue ^{T} 36 D 6
1892 Ardoise ^{F} (*Fr.* Slate) 46 C 7
1925 Argali ^{T} 15 A 4
1562 Argent (Silver) 37 A 2
1927 Argentina ^{T} + 8 L 6
1892 Argus Brown 7 A 12
1912 Argyle Purple ^{R} 43 G 4
1917 Arizona ^{T} 13 E 6
1922 Armada ^{T} + 8 H 6
180– *Armenian Blue* ^{P} (Ult.) 35 G 12
1386 *Armenian Bole* ^{P} (Bole) 5 F 11
1902 Armenian Red ^{M} 6 C 12
1621 *Armenian Stone* ^{P} (Azurite Bl) 36 K 7
1912 Army Brown ^{R} 6 A 10
1928 Arno Blue ^{T} 37 J 6
1682 *Arnotto* ^{V} (Annatto) 10 A 7
1928 Arona ^{T} 39 J 6
1928 Arrowwood ^{T} + 13 C 4
1917 Arsenate ^{T} 25 K 11
182– Art Brown ^{B} + 8 L 6
182– Art Green ^{B} 22 L 7
189– Art Grey ^{B} – 45 B 3
1912 Artemisia Green ^{R} 30 F 2
1918 Artillery ^{T} 1 L 11
1826 **ARTIFICIAL ULTRAMARINE** ^{P} + (see Ult., Art.) 41 F 12
1598 *Artificial Vermilion* ^{P} (see Ver., Im.) 4 A 4
1905 Artichoke Green 20 B 2
1926 Ascot Tan ^{T} – 7 C 10
1374 Ash [Grey] 27 A 2
1892 Ashes of Rose ^{T} (F = 6 A 8) 4 A 4
1902 Asiatic Bronze ^{B} †
1500 *Asmalte* ^{P} (Smalt) 43 D 11
1805 *Asparagus Green* 19 C 3
1927 Aspen Green ^{T} 31 C 6
1922 Asphalt ^{T} 16 A 2
1598 *Asphaltum* ^{P} 8 H 11
1787   *Antwerp Brown*
16—   *Bitumen*
1835   *Egyptian Brown*
17—   *Jew's Pitch*
1796   *Mineral Pitch*
1598   *Mummy*
1649   *Spaltum*
1912 Asphodel Green ^{R} 21 J 5
1916 Aster ^{T} 44 F 7
1886 Aster Purple ^{R} 53 K 10
1927 Athenia ^{T} 5 I 9
1918 Atlantic ^{T} 40 L 1
1928 Atlantis ^{T} + 39 L 8
1925 **ATMOSPHERE** ^{T} 12 A 3
1924 Attar of Roses ^{T} 4 H 10
1646 *Atramentous.* (Inky black) 40 C 7
Atrous (Black)
1794 Aubergine ^{C} (*Fr.* Egg plant) 48 H 12

1430	**AUBURN**	7 C 11
1892	Aubusson ^{T} (F = 22 J 8)	7 H 5
1905	Aucuba Green ^{O} + (Laurel Gr)	22 L 1
1791	Aurelian (Golden)	
1868	Aureolin ^{P} (Cobalt Y).	10 L 2
1881	*Aureoline* (Golden)	
1658	Aureous (Golden)	
1814	Auricula Purple	54 F 12
1398	*Auripigmentum* ^{P} (Orpiment)	10 K 3
1766	Aurora [Orange]	1 G 10
1714	*Aurora Red*	3 G 10
185–	Aurora Yellow ^{P} (Cadmium Y)	9 L 8
1791	Aurore	2 E 7
1731	Aurulent (Golden)	
1500	Aurum (Gold)	14 K 7
1652	*Aurum Mussivum* ^{P} (bronze powder)	
1634	*Aurum Mosaicum*	
1762	*Cat's Gold*	
17—	Mock Gold	
1746	Mosaic Gold	
1902	Australian Pine ^{M} —	22 K 12
1926	Autenil ^{T}	11 C 7
1917	**AUTUMN** ^{T}	8 A 12
1925	Autumn Blonde ^{T}	14 A 7
1923	Autumn Brown	8 E 10
1927	Autumn Glory ^{T}	5 K 12
1892	Autumn Green	22 K 7
1892	*Autumn Leaf* (see † Feuille Morte)	5 A 12
1927	Autumn Oak ^{T} —	7 H 9
	Avellaneous (Hazel)	13 J 9
1727	*Avignon Berries* ^{V} (Persian Berries)	10 L 6
1918	Azalea ^{T}	4 J 3
1920	**AZTEC** ^{T}	13 I 8
187–	Aztec Maroon ^{M}	6 B 5
1892	*Azulin* ^{F}	36 I 8
1374	**AZURE** † (blue)	
1882	Azurean	
	Azureous	
1600	*Azurine*	
1503	*Azurie, Azury*	
1634	*Azurn*	
1816	Azurite Blue ^{P} (see † Bice)	36 K 7
1924	*Air Blue*	
1621	*Armenian Stone*	
1430	*Blue Bice*	
1912	*Chessylite Blue*	
1598	*Hungarian Blue*	
18—	*Lambert's Blue*	
16—	*Mountain Blue*	
1654	*Stone Blue*	
1892	**BABY BLUE**	35 E 2
1928	**BABY PINK** ^{T}	1 C 8
1927	Baby Rose ^{T}	2 G 10
1924	Bacchus ^{T}	53 J 4
1927	Bachelor Button ^{T}	3 B 4
1921	Bagdad ^{T} +	40 L 7
1924	Bakst Green ^{T}	31 H 12
184–	*Balge Yellow* ^{T}	9 L 4
16—	*Ball Lake* ^{P} (Carmine)	3 K 5
1921	Balsam ^{T} +	40 L 4
1927	Balsam Green ^{T}	32 H 5
1918	Baltic ^{T}	31 L 1
1922	Bambino ^{T}	36 G 2
1921	Bamboo ^{T}	13 I 7
1924	Banana ^{T}	11 K 5
1922	Banner ^{T} +	46 H 12
1924	Banshee ^{T}	31 L 5
1919	Barberry ^{T}	5 L 7
1809	**BARIUM YELLOW** ^{P}	10 G 2
1809	*Baryta Yellow*	
1918	Bark ^{T}	8 C 11
1788	*Barwood* ^{V} (Redwood)	
1809	*Baryta Yellow* ^{P} (Barium Y)	10 G 2
1916	Basket ball ^{T}	41 J 12
1548	*Bastard Saffron* ^{V} (Carthamus R)	1 L 11
1919	Bat ^{T}	24 A 2
182–	Bath Stone ^{B}	10 B 3
1806	*Batwing Brown* ^{T} (16 A 10?)	45 A 4
1374	Bay (F — =7 J 10) R =	7 E 11
1926	Bayou ^{T}	31 L 3
1923	Beach ^{T}	13 B 2
1928	Beach Tan ^{T} —	15 A 8
1918	Bear ^{T}	16 A 5
1766	*Bear's hair* ^{T}	16 A 5
1705	*Bearskin [Grey]* ^{T}	16 A 5
1925	Beaucaire ^{T} +	35 L 4
1705	**BEAVER**	15 A 6
1925	**BEAVER, DARK** ^{T}	15 A 9
1917	Beaver pelt ^{T}	15 A 3
1919	Beech ^{T}	15 E 4
1927	Beechnut ^{T} —	15 A 7
1909	Beef's blood ^{C} (Sang de boeuf)	7 L 9
1927	Beeswax ^{T} +	14 L 9
1923	Beetle ^{T}	16 J 6
1892	Begonia ^{T} (F = 46 K 6)	2 K 8
1905	Begonia Rose ^{R}	2 K 2
1887	**BEIGE** (see † Ecru)	11 C 2
1928	Beige Soirée ^{T}	11 B 4
1922	Belladonna ^{T}	44 J 7
1928	Belleek ^{T}	11 B 3
1881	*Bellemonte* ^{T}	4 K 4
1925	Bellflower ^{T}	44 I 12
1724	Berlin Blue ^{P} (Prussian Bl)	
185–	*Berlin Brown* ^{P} (Iron Minium)	7 H 8
	Berlin Red ^{P}. (Bole)	5 F 11
1916	Bermuda ^{T} †	1 J 8
1496	Beryl ^{T} (F = 28 H 2)	33 K 2
1912	Beryl Blue ^{R}	33 H 2
1886	Beryl Green ^{R}	25 J 5
1925	Biarritz ^{T}	13 B 3
1430	*Bice, Blue* ^{P} † (Azurite Blue)	36 K 7
1588	*Bice, Green* ^{P} † (Malachite)	28 A 9
	Big Four Yellow ^{M}	10 L 12
1920	Billiard ^{T}	29 L 11
1858	*Bird's-egg-green* (Robin's Egg Blue)	27 H 3
1912	Biscay Green ^{P}	21 K 5
1884	**BISCUIT** ^{T} +	13 B 6
1919	Bishop ^{T}	44 H 10
1912	Bishop's Purple ^{R} (Bishop's V.)	44 J 6
1789	Bishop's Violet	44 J 6
1923	Biskra ^{T}	16 A 12
18—	Bismarck	6 I 11
1863	Bismarck Brown	14 K 9
1920	Bison ^{T} —	16 A 10
1925	**BISQUE** ^{T}	11 A 3
1727	Bister, Bistre ^{P}	15 C 9
17—	Soot Brown ^{P}	
1905	Bistre Green	13 L 5
1892	Bittersweet ^{T} (F = 3 I 12).	3 J 12
1912	Bittersweet Orange ^{R} —	3 B 12
1912	Bittersweet Pink ^{R}	9 A 8
16—	*Bitumen* ^{P} (Asphaltum)	8 H 11
	BLACK	
1789	*Black Grey* ^{T}	?
1830	*Bladder Green* ^{P} (Sap Green)	22 K 1
1928	Blaze ^{T}	3 J 11
1928	Bleu de Lyon ^{T}	44 B 11
1928	Bleu Passé ^{T} (see †, Old Blue)	36 F 3
1481	Blond (F =	13 G 6
1866	Blondine ^{T}	14 B 7
1534	*Blonket* (<*Fr.* blancâtre, whitish)	34 B 2
1440	*Blunket*	
1533	*Plumbet*	
1534	*Plunket*	
1890	*Blood Orange* ^{T} †	
1297	Blood Red	3 L 11
1737	Blossom ^{T}	2 F 7
1300	**BLUE**	
1915	**BLUE, LIGHT, 1** ^{T}	26 A 2
1915	**BLUE, LIGHT, 2** ^{T}	34 D 1
1915	**BLUE, LIGHT, 3** ^{T}	34 E 1
1915	**BLUE, LIGHT, 4** ^{T}	34 F 1
1920	**BLUE, LIGHT, 5** ^{T}	25 D 2
1920	**BLUE, LIGHT, 6** ^{T}	34 F 2
1764	*Blue Ashes* ^{P} (Verditer Bl)	36 K 7
1927	Blue Aster ^{T} —	44 A 8
1738	Blue Black ^{P}	
1920	Bluebell ^{T}	37 J 10
1916	**BLUEBIRD** ^{T}	36 J 9
1919	Blue Devil ^{T} +	38 C 11
1926	**BLUE FOX** ^{T}	47 E 1
1902	Blue Grass ^{T} —	31 L 6
1928	Blue Haze ^{T}	38 C 3
1923	Bluejay ^{T}	38 L 12
1927	Blue Jewel ^{T}	34 L 4
1926	Blue-Lavender ^{T} (see † Lavender).	43 B 7
1923	Blue Lotus ^{T}	34 F 7
17—	*Blue Ochre* ^{P}	39 H 5
1927	Blue Orchid ^{T}	45 A 7
1927	Blue Sapphire ^{T}	35 L 6
1928	Blueskies ^{T} (see † Sky Bl)	35 B 6
1892	Blue Slate (Slate-Blue)	46 A 7
1923	**BLUE SPRUCE** ^{T} +	30 H 7
1927	**BLUE TURQUOISE** ^{T}	25 K 2
1505	*Blue Verditer* ^{P}	36 K 7
15—	*Blue Wood* ^{V} (logwood)	
1892	Bluet ^{T} (*Fr.* Cornflower †)	34 F 8
1534	*Blunket* (Blonket)	34 B 2
1590	**BLUSH**	12 A 7
1925	**BLUSH ROSE** ^{T}	5 G 4
1892	*Boa* ^{T}	19 B 5
1920	Bobolink ^{T}	14 B 6
	Bohemian Earth ^{P} (Terre Verte)	
1895	**BOIS de ROSE** ^{T} (*Fr.* rosewood †)	5 J 9
1925	**BOKHARA** ^{T} +	47 L 2
1386	**BOLE** ^{P}	5 F 11
	Antwerp Red	
1386	*Armenian Bole*	
	Berlin Red	
1386	*Bole Armoniack*	
1682	*Bolus*	
	Brown Red	
1641	*Crocus Martis*	
17—	*Indian Red*	
	Iron Crocus	
	Iron Saffron	
1611	*Lemnos, Lemnian Earth*	
1865	*Lemnian Ruddle*	
	Naples Red	
	Nuremberg Red	
	Oriental Bole	
1523	*Raddle*	
1748	*Red Bole*	
1538	Red Chalk	
1759	*Redding*	
1759	*Reddle*	
1648	*Red Earth*	
1289	*Red Ochre*	
	Rouge de Fer	
1791	*Rubrica*	
1538	Ruddle	
	Striegau Earth	
1613	*Terra Lemnia*	
	Terra Pozzuoli	
	Terra Rosa	
	Terra Sigillata	
	Venice Red	
1386	*Bole Armoniack* ^{P} (Bole)	5 F 11
1682	*Bolus* ^{P} (Bole)	5 F 11
1924	Bombay ^{T}	14 H 12
180–	Bone Brown ^{P}	8 C 12
1922	Bonfire ^{T} +	3 L 9
1923	Bonito ^{T}	7 C 7
1924	Bonnie Blue ^{T}	43 A 12

18—	Bordeaux [Red] † (Claret)	3 K 4
1892	*Boreal*^{T}	7 J 11
1925	Bosphorus^{T}	31 L 7
1926	Botticelli^{T}	44 L 7
1816	**BOTTLE GREEN**	31 J 7
1892	*Bougainville*^{T}	44 I 6
1928	Boulevard^{T} –	15 C 6
1927	Bouquet Green^{T}	27 H 7
1892	*Bourgeon*^{T} . . (*Fr.* Bud)	20 J 4
1905	Box Green^{T} +	22 L 3
1598	*Box [White], [Yellow]*	?
1924	Bracken^{T}	8 C 12
1920	Bramble^{T}	46 K 12
1925	**BRAN**^{T}	12 D 7
1590	*Brazen Yellow*	11 L 6
1654	Brass	11 L 6
1926	Brazil Brown^{T} –	8 L 8
1190	*Brazilwood*^{V} (Redwood)	
1386	Brazil [Red] †	4 K 12
1705	*Breda Grey*^{T} (a violet brown)	?
1839	*Bremen Blue*^{P}	36 K 1
18—	*Neuwied,Neuwieder Blue*	
1858	*Peligot's Blue*	
1905	*Water Blue*	
1839	*Bremen Green*^{P} (Malachite)	28 A 9
18—	Brewster Green^{M} ++ †	24 L 1
1923	Briar^{T} +	14 L 11
1667	Brick Red †	6 B 11
1922	Brickdust^{T}	5 L 11
1927	Bridal Rose^{T}	3 F 3
1927	Brierwood^{T} –	8 J 6
1927	Brigand^{T}	2 J 11
1705	Brimstone [Yellow] (Sulphur Y)	10 J 1
1551	*Bristol Red*^{T}	?
1551	*Bristowe Red*^{T} (*Bristol R*)	?
1926	**BRITTANY**^{T}	35 J 6
1805	Broccoli Brown	15 C 5
1924	Broncho^{T}	8 E 12
1753	**BRONZE**	14 L 9
18—	Bronze Blue^{P} (Prussian Bl)	
1892	Bronze Brown	16 C 9
1928	Bronze Clair^{T} (*Fr.* light bronze)	13 D 2
1887	Bronze Green +	16 L 9
1928	Bronze Lustre^{T}	16 E 12
1927	Bronze Nude^{T} +	15 H 7
1892	Bronze Red^{F} +	4 K 10
1928	Bronzesheen^{T}	16 H 12
1902	Bronze Yellow	11 L 8
1000	**BROWN** †	
	Broom, Dyer's^{V}	11 J 1
	Dyer's Greenweed	
	Genestrole (Fr.)	
	Genet (Fr.)	
	Trentanel (Fr.)	
1594	*Brown Bay* . . (chestnut)	7 E 10
1705	*Brown Bread*^{T} †	14 L 12
180–	Brown Madder^{P}	7 J 9
1764	Brown Ochre^{P} (Roman Ochre)	11 K 9
1761	*Brown Pink*^{P} (Stil de Grain Br.)	12 L 8
	Brown Red^{P} (Bole)	5 F 11
1892	Brown Stone^{F} +	7 C 10
1927	Brown Sugar^{T}	15 H 11
1919	Bruges^{T}	39 J 7
18—	Brun Doré^{P} (*Fr.* Golden Brown)	15 E 10
1843	Brunneous (dark brown)	
1712	Brunette (dark complexion)	
	Brunswick Blue^{P} (Prussian Bl)	
1764	*Brunswick Green*^{P} (a dull B-Gr)	
183–	**BRUNSWICK GREEN, LIGHT**^{P}	22 L 10
	BRUNSWICK GREEN, MIDDLE	23 C 12^{P}
	BRUNSWICK GREEN, DEEP^{P}	24 A 12
	Royal Green	
	Victoria Green	
1927	Brushwood^{T} +	15 A 7
1912	Brussells Brown^{R}	15 E 11
1927	Buccaneer^{T}	4 L 12
1925	Buckskin^{T}	14 A 6
	Buckthorn Berries^{V} (Persian Berries)	10 L 6
1912	Buckthorn Brown^{R}	13 L 8
1921	Buddha^{T}	4 L 11
1924	Bud Green^{T}	19 K 10
1788	**BUFF** †	11 K 7
1916	Buffalo^{T}	15 L 11
1892	*Bulgare*^{T}	5 J 7
1924	Bunny^{T}	14 K 9
18—	Bure (*Fr.* a rough unbleached cloth)	13 H 8
1892	*Burel*^{T}	15 C 11
1915	**BURGUNDY**^{T}	56 E 8
187–	*Burgundy Violet*^{P} (Manganese V)	42 J 8
1928	Burlwood^{T} +	13 A 5
1923	Burma^{T}	12 J 10
1926	Burmese Gold^{T} +	3 C 11
1928	Burmese Ruby^{T} +	7 H 6
1912	Burn Blue^{R}	34 B 4
1200	*Burnet* (dark brown)	
1923	Burnished Gold^{T}	12 L 7
1920	Burnous^{T}	9 C 4
1918	Burnt^{T} +	12 K 6
1926	Burnt Almond^{T}	14 C 10
1815	Burnt Carmine^{P}	5 K 6
	Burnt Crimson Lake	
1598	Burnt Lake	
	Purple Lake	
1789	Burnt Cinnamon^{T}	?
	Burnt Crimson Lake^{P} (Bt Lake)	5 K 6
	Burnt Italian, Earth^{P} (Bt Sienna)	5 F 12
	Burnt Italian Ochre^{P} (Bt Sienna)	5 F 12
1598	Burnt Lake^{P} (Burnt Carmine)	5 K 6
1598	Burnt Ochre^{P} (Light Red^{P})	3 G 12
1915	**BURNT ORANGE**^{T}	3 E 12
	Burnt Roman Ochre^{P}	10 L 11
1892	Burnt Rose^{F} –	7 L 2
1924	Burnt Russet^{T}	6 L 10
	BURNT SIENNA^{P}	5 F 12
	Burnt Italian Earth	
	Burnt Italian Ochre	
	Burnt Terre Verte^{P} (Verona Br).	7 A 11
1650	**BURNT UMBER**^{P}	15 L 12
1883	Buttercup [Yellow]	11 J 5
1921	Butterfly^{T}	19 I 1
1892	*Butternut*^{T}	15 L 9
1927	Butterscotch^{T} +	14 F 9
18—	*Byron*^{T}	8 E 3
1924	Byzantine^{T}	51 K 8
1926	Byzantium^{T}	44 K 7
1925	Cabaret^{T}	27 I 6
1789	Cabbage Green^{T}	30 H 1
1892	*Cacao*^{F} +	14 L 10
1912	Cacao Brown^{R}	5 B 11
1617	*Cacha*^{V} . . . . . (Catechu)	7 C 11
1708	Cachou^{V} (*Fr.* Catechu)	7 C 11
1922	Cactus^{T}	22 C 7
1915	**CADET**^{T}	46 A 6
1892	Cadet Blue . . (F = 35 B 4)	35 C 9
1912	Cadet Grey^{R}	36 C 4
	Cadmium Carmine^{P}	3 L 10
	Cadmium Green^{P}	20 B 12
185–	**CADMIUM LEMON**^{P}	9 L 1
1862	**CADMIUM ORANGE**^{P}	9 L 10
	Cadmium Purple^{P}	5 L 8
1868	Cadmium Red^{P}	2 J 12
	Cadmium Vermilion^{P}	3 L 11
185–	**CADMIUM YELLOW**^{P}	9 L 8
185–	Aurora Yellow	
186–	Daffodil Yellow	
186–	*Orient Yellow*	
191–	Caen Stone^{M}	10 B 3
1667	*Caerulean* (*Ln.* blue, sky blue)	
1573	*Caeruleous* (*Ln.* blue, sky blue)	
1859	Caeruleum^{P} (Cerulean Blue)	33 L 9
1601	*Caeruleum*^{P} (Blue Ochre)	
1839	Café-au-lait + (*Fr.* Coffee with milk).	12 A 6
1928	Café Crème^{T}	14 D 8
1928	Café Noir^{T} –	8 H 12
1598	*Cain-colored* (sandy, red-blond hair)	
1920	Cairo^{T}	37 E 12
1923	Calabash^{T}	14 J 7
1912	Calamine Blue^{R}	33 J 2
1928	Caldera^{T} (*Sp.* Cauldron, †)	7 L 12
186–	Caledonian Brown^{P}	6 B 12
18—	*California Color*^{T} †	14 H 10
18—	*California Green*^{T}	13 H 14
1912	Calla Green^{R}	22 L 4
1912	Calliste Green^{R}	19 L 6
1687	*Caliaturwood*^{V} (Redwood)	
1836	Cambridge Blue + (see † Eton)	35 J 1
1892	Cambridge Red	4 K 8
1916	Camel^{T} +	15 A 6
1923	Camels Hair^{T}	14 B 6
1899	Camellia	2 J 4
190–	Cameo Blue^{B}	26 F 3
1912	Cameo Brown	6 F 9
190–	Cameo Green^{B}	27 B 6
1912	Cameo Pink	50 C 2
190–	Cameo Yellow^{B} –	10 E 2
1892	*Camérier*^{T}	45 K 10
1918	Campanula^{T}	42 J 10
1886	Campanula Blue^{R}	42 B 8
1814	Campanula Purple, Violet	44 G 5
150–	*Campeachy wood*^{V} ++ (logwood)	48 E 12
1698	*Camwood*^{V} . . (Redwood)	
1892	Canard^{T} . . . . (*Fr.* Duck).	38 L 3
1705	*Canary Green*^{T}	12 L 3
1705	*Canary-bird Green*^{T}	12 L 3
1789	**CANARY [YELLOW]** (F = 11 J 2)	11 L 3
1630	*Candid* . . . . . . (white)	
1925	Candida^{T}	51 C 5
1926	Candy Pink^{T}	2 H 10
1602	*Cane-colored* (Cain-colored)	
1922	Canna^{T}	4 J 11
1918	**CANNON**^{T} †	32 A 5
1921	Canterbury^{T}	43 K 12
1920	Canton [Blue]^{T}	39 E 11
1927	Canton Jade^{T}	30 L 6
1920	Canyon^{T} –	7 E 6
1892	*Capilaire*^{T} + (*Fr.* maiden's hair fern)	22 J 7
1814	Cappagh, Cappah Brown^{P}	7 C 12
1920	Capri^{T} †	35 L 7
1922	Caprice^{T}	51 G 11
1791	Capucine + (*Fr.* Nasturtium)	11 L 3
1912	Capucine Buff^{R}	9 E 5
	Capucine Lake^{P}	10 A 11
	Capucine Madder^{P}	10 B 9
18—	Capucine Orange^{R}	9 I 8
18—	Capucine Red^{O}	9 E 12
18—	Capucine Yellow^{R}	9 K 8

1641	*Caput Mortuum* ^{P} (Colcothar).	7	L	11
1892	*Caraibe* ^{T} –	15	H	11
1921	Caramel ^{T}	12	F	10
1634	Carbuncle +	8	L	7
1698	**CARDINAL [RED]**	5	L	5
1915	**CARDINAL, DARK,** ^{T}	6	L	8
1523	Carmine ^{A} (see † Crimson)	3	K	5
	Animal Rouge			
	Ball Lake,			
	Carmine Lake			
	Chinese Lake			
1822	*Florentine Lake*			
18—	*Hamburg Lake*			
1598	Lake			
	Munich Lake			
	Roman Lake			
	Venetian Lake			
	Vienna Lake			
1902	*Carmetta* ^{P} . . . (Imit. Ver.)			
189–	Carminette ^{P} (Imit. Ver.)			
1535	Carnation † . . (Flesh)	11	B	2
	Carnation [Red] † (the flower)	4	I	4
1789	*Carnation de Veillards* ^{T} (*Fr.* aged flesh pink)	?		
1923	Carnelian ^{T}	4	I	11
1899	Carnelian Red ^{R}	2	E	11
1926	Carnival Red ^{T}	3	L	7
1905	Carob Brown +	7	C	12
1876	*Caroubier* ^{T} +	7	C	12
1927	Carrara Green ^{T}	31	J	11
1684	Carrot Red †	10	C	11
1548	Carthamus Red ^{V}	1	L	11
	Bastard Saffron			
	Carthamus Rose			
	Chinese Rouge			
	Dyer's Saffron			
	Leaf Red			
1905	*Lincoln Red*			
	Portugese Red			
	Red in plates			
	Rose Carthame			
	Rouge Vegetal			
	Saffor			
1583	Safflower Red			
18—	*Spanish Red*			
	Vegetable Red			
	Vegetable Rouge			
1923	Cartouche ^{T} + (*Fr.* cartridge)	14	B	9
1912	Cartridge Buff ^{R} –	11	B	2
1921	Cascade ^{T}	25	J	3
18—	Cashew Lake ^{P} (Catechu)	7	C	11
1928	Cashew Nut ^{T} –	15	A	8
16—	*Cashoo* ^{V} . . . . (Catechu)	7	C	11
1928	Casino Pink ^{T}	1	I	4
183–	*Cassel Brown* ^{P} (Vandyke Br)	7	A	11
183–	**CASSEL EARTH** ^{P} (Vandyke Br)	7	A	11
1782	*Cassel Yellow* ^{P} (Turner's Y)	10	K	3
1924	Casserole ^{T}	7	H	11
1688	Castaneous . . (Chestnut)	7	E	10
1927	Castellon ^{T} +	7	J	11
1839	*Castile Earth* ^{P} (Cassel Earth)	7	A	11
1928	Castilian Brown ^{T}	7	J	9
1925	**CASTILIAN RED** ^{T}	1	L	10
183–	*Castle Earth* ^{P} (Cassel Earth)	7	A	11
1892	**CASTOR** . . . . (F = 7 A 9).	16	A	8
1912	Castor Grey ^{R}	31	C	2
1596	*Castory* (reddish-brown)			
1892	*Catalpa* ^{T}	44	D	3
1916	Catawba ^{T}	56	J	12
1654	Catechu ^{V}	7	C	11
1617	*Cacha*			
1708	Cachou, . . . (*Fr.*)			
1708	Cashew, 18— Cashoo			
1698	*Cate*			
1759	*Cotch*			
1805	Cutch			
18—	Gambia			
1741	*Japan Earth*			
1683	*Terra Japonica*			
1924	Cathay ^{T} –	12	L	9
1919	Cathedral ^{T}	47	J	12
1926	Cathedral Blue ^{T}	43	C	10
1762	*Cat's Gold* ^{P} (Aurum Mussivum)			
1920	Cattail ^{T}	8	H	12
1905	Cattleya ^{T}	42	H	6
1925	Caucasia ^{T} +	14	C	6
1920	Cauldron ^{T} †	6	K	11
1918	Cavalry ^{T}	9	L	7
1737	Cedar +	7	H	7
1926	Cedarbark ^{T}	6	J	10
1600	Cedar Green	23	L	5
1926	Cedar Wood ^{T}	6	G	10
1892	Cedre ^{F} . . . . . . (*Fr.* Cedar).	23	L	5
16—	Celadon Green	21	B	4
	Celadon Yellow ^{P} (Terra Verte)			
1807	Celandine Green	29	B	4
1584	Celest, –e + (see † Sky Blue)	36	B	7
1922	Celestial ^{T} (see † Sky Blue)	35	I	8
1535	Celestial Blue (see † Sky Blue)	35	D	3
1926	Cellini ^{T}	51	I	11
1922	Cement ^{T}	46	A	1
1764	Cendre Blue ^{P} (Verditer Blue)	36	K	7
17—	Cendre Green † (green ashes)			
1892	*Cendrillon* ^{T} (*Fr.* Cinderella)	39	H	2
	Centennial Brown +	13	K	8
1923	Ceramic ^{T}	36	K	7
1924	Ceres ^{T}	9	C	8
1858	**CERISE** † (*Fr.* cherry)	4	J	6
1912	Cerro Green ^{R}	22	L	5
1928	Certosa ^{T}	20	L	3
1590	Cerulean . . . . (Sky Blue).	33	E	6
1859	Cerulean Blue ^{P}	33	L	9
1859	Caeruleum, Coeruleum ^{P}			
1859	Ceruleum ^{P}			
1386	Ceruse ^{P} (*Fr.* White Lead)			
1895	*Céruse* ^{T} (*Fr.* White Lead)	6	A	1
1927	Ceylon Blue ^{T} +	38	L	6
1912	Chaetura Black ^{R}	8	C	8
1912	Chaetura Drab ^{R}	16	A	5
1912	Chalcedony Yellow ^{R} +	10	I	1
1928	Chalet Red ^{T}	6	K	10
1766	**CHAMOIS**	11	I	5
1928	Chamois Skin ^{T}	11	I	5
1902	Chamoline ^{M}	13	L	8
1915	**CHAMPAGNE** +	11	B	3
1926	Chantilly ^{T}	26	F	7
1606	Charcoal Black ^{P}			
	Charcoal Grey ^{P}	47	A	2
1892	*Chardon* ^{T} (*Fr.* Thistle, see †)	55	E	10
1892	*Charles X* ^{T}	54	J	8
1892	**CHARTREUSE** (F = 19 J 3)	11	L	1
1926	Chartreuse Green ^{T}	12	L	2
1912	Chartreuse Yellow ^{R} –	11	I	1
1892	*Chasseur* ^{T} (Hunter Green, †)	24	C	11
1892	Chateau Grey ^{T}	46	A	2
18—	*Chatemuc* (Crimson Lake)	4	K	6
1912	Chatenay Pink ^{R}	2	E	8
1880	Chaudron ^{T} (*Fr.* cauldron, †)	4	J	11
1928	Checkerberry ^{T} +	5	L	6
1743	*Chemic Blue* ^{T} (Saxon Bl)	37	J	7
1743	*Chemic Green* ^{T} (Saxon Gr)	36	K	1
1927	Cherokee ^{T}	3	D	12
1447	**CHERRY** (see † Cerise)	2	L	12
1924	Cherry Bloom ^{T}	1	I	8
1867	Cherry Blossom ^{T}	4	J	4
1594	Cherry Red . . (Cherry)	2	L	12
1922	Cherub ^{T}	9	A	6
1905	Chessylite Blue [Azurite B]	36	K	7
1555	**CHESTNUT [BROWN]** †	7	E	10
1926	Chevreuse ^{T}	6	H	10
1928	Chianti ^{T}	6	L	6
1924	Chicle ^{T}	7	C	9
1916	Chicory ^{T}	42	B	7
1905	Chicory Blue ^{O} +	28	A	2
1927	Chickadee Gray ^{T} +	47	A	1
1926	Chimney Red ^{T} +	5	L	10
17—	China Blue	36	J	7
1925	China Rose ^{T}	5	A	6
1926	Chin-Chin Blue ^{T}	36	I	8
1917	Chinchilla ^{T}	37	A	3
18—	**CHINESE BLUE** ^{P} † (Prussian Blue)			
1925	Chinese Gold ^{T}	12	K	10
1922	Chinese Green ^{T} –	29	L	10
1852	*Chinese Green* ^{V} (Lokao)	18	A	8
	Chinese Lake ^{P} (Carmine).	3	K	5
183–	Chinese Orange (Japanese Y)	9	D	12
	Chinese Red ^{M} (Imit. Ver.)			
1924	Chinese Red ^{T} –	3	J	12
	Chinese Rouge ^{V} (Carthamus R)	1	L	11
13—	**CHINESE VERMILION** ^{P}	2	L	11
1912	Chinese Violet ^{R}	42	I	7
	Chinese Yellow ^{P} (Yellow Ochre)	11	L	7
1835	*Chinese Yellow* ^{P} (Orpiment)	10	K	3
1924	Chinese Yellow ^{T}	10	K	6
1924	**CH'ING** ^{T}	36	F	12
1927	Chinook ^{T}	5	H	12
1928	Chip ^{T} +	13	B	2
1917	Chipmunk ^{T}	13	L	9
1917	Chippendale ^{T}	8	H	5
1921	Chiswick ^{T}	38	J	12
1737	**CHOCOLATE** †	8	H	10
1928	Chocolate Brown ^{T} + (see † Chocolate)	8	H	9
1892	*Chocolate Maroon* ^{F} +	7	J	3
	Chrome Citron ^{P} (Chrome Lemon)	9	K	2
1815	**CHROME GREEN, LIGHT** ^{P} †	22	L	12
1815	**CHROME GREEN, MEDIUM** ^{P}	23	H	12
1815	**CHROME GREEN, DEEP** ^{P}	24	H	12
	Cinnabar, Zinnober Gr			
	Green Vermilion			
	Milori Green			
	Silk Green			
	Zinc Green			
1879	**CHROME GREEN** ^{P} *Eur.* (*Am.* Chrom. Ox.)	28	K	11
1875	**CHROME LEMON** ^{P}	9	K	2
1818	**CHROME ORANGE** ^{P}	10	J	12
	Chrome Primrose ^{P}	9	K	1
18—	Chrome Scarlet ^{P}	2	E	12
	Chrome Red ^{M} (Am. Ver.)			
1818	**CHROME YELLOW, LIGHT** ^{P} †	10	L	4
	Chrome Yellow			
1818	**CHROME YELLOW, DEEP** ^{P}	9	L	7
	Chrome Yellow, Medium or Middle			
1886	Chromium Green ^{R}	21	K	7
	Chromium Oxide, Opaque ^{P}	21	B	8
1838	Chromium Oxide, trans. ^{P}	28	K	11
186–	Emeraude			
186–	Veronese Green, [French]			
186–	Viridian			

1925	Chrysanthemum ^{T}	5 L 12
1601	*Chrysocollo* ^{P} (Malachite Green)	28 A 9
1821	Chrysolite Green	19 K 3
1835	Chrysoprase [Green]	17 A 10
1925	Chukker Brown ^{T}	15 C 8
1922	Chutney ^{T}	7 J 12
1923	Cigarette ^{T}	14 K 11
1888	Cinder [Grey] —	53 A 2
1917	Cineraria ^{T}	52 L 8
1661	Cinereous + . (Ash Grey)	35 A 3
1382	Cinnabar ^{P} † (Vermilion in crystals.)	
18—	Cinnabar Green ^{P} † (Chrome Gr)	
1679	**CINNAMON**	12 E 7
1797	Cinnamon Brown (Cinnamon)	14 I 10
1926	Cinnamon Pink ^{T}	5 C 10
1926	Circassian ^{T} + (F = 5 D 4)	15 A 10
1386	**CITRINE** †	14 L 6
1430	Citron [Yellow] +	10 J 2
1912	Citron Green	19 K 2
1928	Citronelle ^{T}	18 L 2
1917	Citrus ^{T}	10 J 1
1905	Civette Green	22 E 8
	Clair de lune ^{C}	36 E 2
1547	**CLARET [RED]** (see † Bordeaux)	3 K 4
1847	Claret Brown	
1916	Claret Cup ^{T}	6 B 4
1892	*Claret Lees* ^{T}	47 J 6
1705	*Claver* ^{T} .....(Clover)	51 C 7
1594	Clay	13 J 8
1851	Clay Bank	12 K 9
1902	Clay Drab ^{M}	14 I 7
1899	Clematis	42 K 11
1923	**CLEOPATRA** ^{T}	35 J 12
1926	Clochette ^{T} (*Fr.* little bell)	43 D 9
1924	Cloisonné ^{T}	34 D 12
17—	*Cloth Color* ^{T} †	
1921	Cloud ^{T}	36 G 5
1926	Cloud Grey ^{T} —	45 B 2
1928	Cloudy Amber ^{T}	12 K 3
1921	Clove ^{T}	15 C 12
1705	Clove Brown	16 A 7
1928	Clove Pink ^{T} (see † carnation)	6 K 5
1923	Clover ^{T}	51 C 7
1250	Coal-Black	
1777	**COBALT BLUE** ^{P}	34 L 7
18—	Cobalt Ultramarine	
1857	*Leithner's Blue*	
18—	*Leyden Blue*	
18—	*Olympic Blue*	
1802	*Thenard's Blue*	
178–	Venetian Blue	
1835	*Vienna Blue*	
	Cobalt Glass ^{P} (Smalt)	43 D 11
1780	Cobalt Green ^{P}	20 D 9
179–	Rinnemann's Green	
1790	*Saxony Green*	
179–	*Smalt Green*	
179–	*Zinc Green*	
1859	*Cobalt Red* ^{P}	42 K 2
18—	Cobalt Ultramarine ^{P} (Cobalt Bl)	34 L 7
1859	Cobalt Violet ^{P}	42 J 7
1861	Cobalt Yellow ^{P} (Aureolin)	10 L 2
1928	Cobblestone ^{T}	48 C 4
1928	Cobweb ^{T}	5 B 7
1654	Coccineous.. (Scarlet)	1 L 12
1892	*Cocher* ^{T} — (*Fr.* coachman)	15 L 10
1920	Cochin ^{T}	7 A 12
1586	Cochineal † (see † Scarlet)	1 L 10
1705	*Dutch Scarlet* ^{T}	
1789	*Fire Scarlet* ^{T}	
1789	*Goblin Scarlet* ^{T}	
1920	Cockatoo ^{T} —	10 H 2
1887	Cocoa (F + = 15 C 8)	7 E 12
1925	**COCOA BROWN** +	15 C 11
1892	*Cocobala* ^{T} +	7 H 8
1927	Coconut ^{T} +	7 C 10
1902	Coconut Brown ^{M}	14 C 10
1705	*Cod Grey* ^{T} ...(*Fish Grey*)	16 C 7
1859	Coeruleum ^{P} (Cerulean Bl)	33 L 9
1695	Coffee	15 A 11
1928	Cognac ^{T}	14 J 11
1605	Colcothar ^{P}	7 L 11
17—	*Angel Red* †	
1641	*Caput Mortuum*	
17—	*English Red*	
17 –	*Florence Earth*	
1804	Prussian Red	
1705	*Colewort Green* ^{P} (Cabbage Green)	30 H 1
1920	Colibri ^{T} † (*Fr.* Humming-bird)	28 L 7
1924	Collie ^{T}	15 E 10
17—	Cologne Brown ^{P} (Vandyke Br)	7 A 11
1764	Cologne Earth ^{P} (Vandyke Br)	7 A 11
186–	*Cologne Yellow* ^{P} (Chrome Y)	10 L 4
1921	Colonial ^{T}	39 C 12
1912	Colonial Buff ^{R} + †	10 G 2
1928	Colonial Rose ^{T}	4 I 8
18—	**COLONIAL YELLOW** ^{M} †	11 K 3
1922	Columbia ^{T}	43 B 12
1814	*Columbian Red* ^{F}	7 J 9
1918	Columbine [Blue] ^{T}	42 G 10
1598	*Columbine* [*Red*] (Dove)	47 L 4
1922	Comet ^{T}	37 F 8
1912	Commelina Blue ^{R}	42 B 10
1921	Commodore ^{T}	43 F 12
1926	Como ^{T}	37 K 4
1789	*Complete Blue* ^{T} (deep indigo)	
1925	Conch Shell ^{T}	1 D 10
1922	Concord ^{T}	45 K 12
1892	*Condor* ^{T} +	14 K 10
1923	Confetti ^{T}	2 J 10
1922	Congo [Brown] +	8 H 11
1912	Congo Pink ^{R} +	3 C 10
1927	Continental Blue ^{T} +	48 C 11
1926	Cookie ^{T}	14 C 3
1924	Coolie ^{T} +	45 D 12
188–	**COPENHAGEN [BLUE]**	37 E 7
192–	Copen	
1594	Copper	4 I 11
	Copper Blue ^{P} (Verditer Bl)	36 K 8
1842	Copper Brown	6 C 12
1843	*Copper Green* ^{P} (Malachite)	28 A 9
1927	Copper Leaf ^{T}	6 J 11
1925	Copper Lustre ^{T}	5 C 12
1590	Copper Red	4 I 11
1928	Copper Rose ^{T} +	5 J 5
1882	Copper Yellow	11 L 3
1924	Copra ^{T}	7 C 8
1923	Coptic ^{T} +	7 L 9
1795	Coquelicot (*Fr.* Corn-poppy)	1 J 12
1928	Coquette ^{T}	2 C 10
1513	**CORAL [RED]**	2 J 10
1928	Coralbell ^{T}	3 H 10
1927	**CORAL BLUSH** ^{T}	1 F 10
1892	Coral Pink	2 F 9
1926	Coral Sands ^{T} +	3 B 8
1633	Coralline....(Coral)	
1806	*Corbeau* ^{T} ....(*Fr.* Raven)	
1925	Cordova ^{T}	7 J 11
1925	**CORDOVAN** ^{T}	8 H 8
1892	*Corial* ^{F}	3 B 9
1926	Corinth ^{T}	46 J 2
1912	Corinthian Pink ^{R}	3 G 1
1912	Corinthian Purple ^{R}	6 C 5
184–	Corinthian Red	5 J 2
1718	*Cornelian Red* (Carnelian)	4 I 11
1902	**CORK**	13 B 7
1483	Corke ^{V} ......(Orchil) Corcir, Corker, Corkur	
1887	Corn	10 J 5
1891	**CORNFLOWER [BLUE]** †	42 C 10
1923	Cornhusk ^{T}	10 E 6
1927	Cornsilk ^{T}	10 G 3
1924	Coromandel ^{T}	7 L 11
1917	Coronation ^{T}	46 L 8
1927	Corsage Green ^{T}	28 G 6
1920	Corsair ^{T}	40 L 12
1928	Corsican Blue ^{T} +	45 H 12
1912	Corydalis Green ^{R}	19 B 4
1924	Cosmos ^{T}	50 D 6
1892	*Cossack* ^{T}	38 K 2
1912	Cossack Green ^{R}	23 J 11
1905	Cosse Green ^{R} (*Fr.* Pod)	19 L 5
1759	*Cotch* ^{V} ......(Catechu)	7 C 11
1912	Cotinga Purple ^{R}	45 L 10
1910	Cotrine ^{M}	12 J 8
1912	Courge Green ^{R} (*Fr.* Gourd)	21 L 3
1912	Court Grey ^{R}	27 B 2
1415	*Coventry Blue* ^{T} (Indigo on thread)	
1924	Cowboy ^{T}	15 E 11
1923	Cowslip ^{T}	10 J 9
1924	**CRAB APPLE** ^{T}	2 F 11
1928	**CRACKER** ^{T}	13 D 6
1924	Crag ^{T} +	15 C 2
1423	*Cramoisy* (Kermes Crimson)	
1517	**CRANE**	54 A 2
1925	**CRASH** ^{T}	12 D 3
17—	*Crawshay Red* ^{P} (English R)	4 H 12
1926	Crayon Blue ^{T}	36 C 5
1590	**CREAM**	9 D 4
1927	Cream Beige ^{T} —	13 A 6
1886	Cream Buff ^{R}	10 E 3
1926	Creole ^{T}	13 A 9
1883	Cress Green ^{T} +	22 K 6
1883	Cresson ^{P} + (*Fr.* Cress Gr)	22 K 6
1892	Crevette ^{T} (*Fr.* Shrimp †)	1 E 10
1400	**CRIMSON** †	
15—	Crimson Lake ^{P} †	4 K 6
1863	Crimson Madder ^{P}	2 L 9
1927	Crimson Maple ^{T} —	7 L 5
1647	*Crocreal* (Saffron Yellow)	10 K 2
1657	Croceus (Saffron Yellow)	10 K 2
1892	*Crocodile* ^{T} —	16 L 6
1920	**CROCUS** ^{T}	43 F 4
1659	*Crocus* ^{V} .....(Saffron)	10 L 7
1641	*Crocus Martis* ^{P} (Bole)	5 F 11
	Crotal ^{V} ......(Orchil)	
1806	*Crow* ^{T} (black of violet tone)	
1923	Cruiser ^{T}	48 A 1
1923	Crushed Berry ^{T}	6 F 4
1886	Crushed Strawberry † (F = 6 J 4)	1 H 3
1926	Crushed Violets ^{T}	45 G 5
1926	Crystal Grey ^{T}	53 A 1
190–	Crystal Palace Blue ^{B} +	38 A 12
190–	Crystal Palace Green ^{B} —	31 A 2
16—	*Crystals of Venus* ^{P} (Verdigris)	28 B 7
1918	Cub ^{T}	15 C 1
1916	Cuba ^{T} +	6 L 10
1928	Cuban Sand ^{T} —	13 A 3
1771	*Cudbear* ^{V} (see Orchil)	
1892	*Cuir* ^{V} (*Fr.* Leather, †)	11 C 6
18—	*Cuisse de Nymphe* ^{T} — (*Fr.* Nymph's Thigh)	10 B 2
1600	*Cullen Earth* ^{P} (Cologne Earth)	7 A 11
1928	Cupid Pink ^{T}	1 E 8
1804	Cupreous (Copperish)	10 J 2
1617	*Curcuma* ^{V} ...(Turmeric)	10 J 2
1899	Currant [Red]	3 L 10
1617	*Cutch* ^{V} ......(Catechu)	7 C 11
1892	*Cuyahoga Red* ^{F} +	7 J 3

1879	Cyan Blue^{F} +	**26**	**J**	**2**
1688	Cyaneous † (dark blue)			
	Cyanine Blue^{P} (Leitch's Bl)	**34**	**L**	**10**
1886	Cyanine Blue^{R}	**45**	**E**	**12**
1905	Cyclamen^{T}	**47**	**L**	**9**
1925	Cygnet^{T}	**45**	**L**	**7**
1905	Cypress [Green]	**23**	**L**	**6**
	Cyprus Earth^{P} (Raw Umber)	**15**	**L**	**12**
1905	Cyprus Green^{P}	**18**	**K**	**9**
	Cyprus Umber^{P} (Raw Umber)	**15**	**L**	**12**
	Cyprian Earth^{P} (Terre Verte)			
	Cyprian Green^{P} (Terre Verte)			
1855	Daffodile [Yellow]	**10**	**J**	**6**
186–	Daffodil Yellow^{P} (Cadmium Y)	**9**	**L**	**8**
1924	Dagestan^{T}	**40**	**L**	**11**
1846	Dahlia^{T}....(F = 44 H 3)	**43**	**I**	**6**
1912	Dahlia Carmine^{R}	**46**	**L**	**3**
1928	Dahlia Mauve^{T}	**53**	**D**	**9**
1886	Dahlia Purple	**55**	**J**	**12**
1661	*Damascen*....(Damson)	**45**	**J**	**11**
1588	Damask	**4**	**K**	**1**
1835	*Damonico*^{P}..(an ochre)	**10**	**A**	**11**
1667	Damson^{T}	**45**	**J**	**11**
1667	*Danaë*^{T} + (a deep woad)	**47**	**A**	**10**
1895	*Danaë*^{T}	**9**	**L**	**9**
1919	Dandelion^{T} †	**9**	**L**	**4**
1922	Dante^{T} +	**47**	**L**	**10**
1912	Danube Green^{R}	**31**	**A**	**10**
1924	Daphne^{T}	**33**	**H**	**8**
1912	Daphne Pink^{R}	**52**	**I**	**1**
1912	Daphne Red^{R}	**4**	**A**	**5**
1920	Date^{T} –	**16**	**A**	**12**
1892	*Datura*^{T} (*Fr.* Thorn-apple)	**44**	**I**	**7**
1892	*Dauphine*^{T}	**4**	**C**	**3**
18—	Davy's Grey^{P}	**47**	**A**	**4**
1920	Dawn^{T}	**42**	**D**	**1**
1912	Dawn Grey	**37**	**A**	**2**
1923	Daybreak^{T}	**42**	**E**	**6**
1923	Daytona^{T} +	**14**	**A**	**3**
1850	*Dead Carnations*^{T}	**4**	**B**	**5**
1690	Dead Leaf (Feuille morte, †)	**5**	**A**	**12**
1927	Deauville Sand^{T}	**14**	**A**	**5**
1927	Débutante Pink^{T}	**1**	**G**	**7**
1611	**DEER** +	**14**	**B**	**6**
18—	**DELFT BLUE** †	**38**	**A**	**8**
1925	Della Robbia^{T}	**43**	**C**	**11**
1923	Del Monte^{T}	**46**	**E**	**7**
1919	Delphinium^{T}	**36**	**F**	**6**
1924	De'Medici^{T}	**54**	**L**	**12**
1919	Denmark^{T}	**38**	**J**	**8**
1916	Denver^{T}	**45**	**A**	**4**
1760	Derby Blue^{C}	**45**	**J**	**12**
	Derby Red^{M} (1 mit. Ver.)			
1920	Desert^{T}	**12**	**I**	**7**
1898	*Devil's Red*^{P} (Para Red)	**3**	**L**	**11**
1899	*Devon* [*Brown*]	**6**	**J**	**9**
1898	*Dewey Red*^{P} (Para Red)	**3**	**L**	**11**
1926	Dewkiss^{T}	**29**	**C**	**3**
1926	Diadem^{T}	**43**	**E**	**5**
1924	Diana^{T}	**40**	**I**	**6**
1919	Dianthus^{T}	**5**	**K**	**3**
1892	*Diavolo*^{T}	**4**	**J**	**3**
1917	Digitalis^{T}	**45**	**G**	**8**
1835	*Di Palito*^{P} (l. Yellow Ochre)	**11**	**L**	**7**
1927	Directoire Blue^{T}	**43**	**A**	**11**
17—	*Distilled Green*^{P} (Verdigris)	**28**	**B**	**7**
1912	Diva Blue^{R}	**43**	**B**	**10**
1902	Doe	**13**	**B**	**6**
190–	Doe-skin Brown^{B} +	**5**	**B**	**9**
1923	Doge^{T}	**4**	**K**	**9**
1926	Dogwood^{T}	**14**	**E**	**8**
1928	Dolly Pink^{T}	**2**	**K**	**3**
1916	Domingo^{T}	**7**	**J**	**8**
1928	Domingo Brown^{T}–	**8**	**L**	**9**
1926	**DORADO**^{T}	**11**	**C**	**6**
	Doré........(*Fr.* Golden)			
1398	*Dorrey, Dorroy*			
1398	*Dory, Dorye*			
1688	*Durry*			
1925	Doubloon^{T}	**11**	**K**	**9**
1892	Dove^{T} +	**47**	**A**	**2**
1598	*Dove* (Columbine Red)	**47**	**L**	**4**
1705	**DOVE GREY**^{T}	**45**	**B**	**1**
1891	Dover Grey	**39**	**A**	**3**
1925	Dozar^{T}	**39**	**J**	**10**
1686	**DRAB**	**14**	**B**	**5**
1789	*Drabolve*^{T} (Olive Drab)	**15**	**J**	**5**
1917	Dragonfly^{T}	**37**	**L**	**6**
1599	Dragon's Blood	**4**	**J**	**10**
1917	Drake^{T}	**37**	**L**	**5**
1846	*Drake's-neck Green*^{T} (Drake)	**37**	**L**	**5**
1902	Dregs of Wine ++	**7**	**L**	**7**
	Dresden Blue	**34**	**I**	**7**
1912	Dresden Brown^{R}	**14**	**K**	**8**
1924	Dryad^{T}	**28**	**H**	**4**
1705	*Dry Rose*^{T}	**5**	**J**	**10**
1925	Du Barry^{T}	**9**	**A**	**8**
1918	Duck Blue^{T}	**36**	**L**	**7**
1789	Duck Green	**31**	**L**	**6**
1924	Duckling^{T}	**39**	**L**	**6**
1876	Duck's Egg Green †			
1789	*Duck-Wing*^{T}	**47**	**E**	**11**
1892	*Du Gueslin*^{T} –	**39**	**H**	**11**
	Dumont's Blue^{P} (Smalt)	**43**	**D**	**11**
953	**DUN** †			
1920	Dune^{T} +	**14**	**B**	**3**
1928	Durango^{T} +	**14**	**B**	**9**
1688	*Durry*.......(Doré)			
1000	Dusk	**47**	**C**	**6**
1607	**DUST** +.....(F = 14 J 5)	**14**	**B**	**4**
1928	Dusty Green^{T}	**22**	**C**	**1**
1751	*Dutch Azure*^{P} (Smalt)	**43**	**D**	**11**
1912	Dutch Blue	**44**	**A**	**6**
1814	*Dutch Orange*	**10**	**L**	**8**
1758	Dutch Pink^{P} (Stil de grain Y)	**10**	**K**	**2**
1705	*Dutch Scarlet*^{T} (Cochineal)	**1**	**L**	**10**
1905	Dutch Ware Blue^{B} (Delft Bl)	**38**	**A**	**8**
15—	*Dyer's Broom, Greenwood*^{V}	**11**	**J**	**1**
15—	*Dyer's Saffron*^{V} (Carthamus R)	**1**	**L**	**11**
1920	Eagle^{T}	**16**	**A**	**7**
1905	Eau-de-Javel Green^{O}	**19**	**L**	**2**
1899	Eau-de-Nile..(Nile Green)	**19**	**B**	**5**
1590	Ebony, Ebon (Black)			
1656	Eburnean....(Ivory)	**10**	**B**	**2**
1925	Ecclesiastic^{T}	**52**	**A**	**12**
1869	**ECRU** (*Fr.* unbleached, raw) †	**11**	**C**	**2**
1926	Eden Green^{T}	**20**	**L**	**9**
1915	**EGGPLANT**	**48**	**H**	**12**
182–	Eggshell Blue^{B} (Robin's Egg Bl. †)	**27**	**H**	**3**
182–	Eggshell Green^{T} (Robin's Egg Bl. †)	**27**	**H**	**3**
1922	Eglantine^{T}..(F = 4 B 4)	**3**	**C**	**6**
1920	Egypt^{T}	**34**	**H**	**11**
1892	*Egyptian*^{F}	**5**	**D**	**3**
1835	*Egyptian Brown*^{P} (*Mummy*^{P})	**8**	**H**	**11**
1809	*Egyptian Blue*^{P}	**35**	**L**	**8**
1902	Egyptian Green	**28**	**I**	**10**
1922	Egyptian Red^{T}	**6**	**L**	**11**
1892	*Eifel*^{T} +	**6**	**J**	**10**
1918	Elderberry^{T}	**45**	**J**	**12**
1923	Eldorado^{T}	**12**	**B**	**12**
1884	**ELECTRIC [BLUE]** †	**37**	**I**	**7**
1898	*Electric Green* (Electric Bl)	**37**	**I**	**7**
1892	Elephant Green	**24**	**C**	**11**
1928	Elephant Skin^{T}	**7**	**A**	**2**
1884	Elephant's Breath †			
1921	Elf	**27**	**E**	**6**
1926	Elfin Green^{T}	**27**	**F**	**7**
1919	Elk^{T}	**16**	**A**	**11**
1912	Elm Green^{R}	**23**	**J**	**5**
1928	Elmwood^{T} –	**13**	**B**	**3**
.1892	Email^{T} + (*Fr.* Enamel)	**36**	**K**	**2**
1919	Ember^{T}	**5**	**K**	**10**
1928	Emberglow^{T}	**3**	**G**	**10**
1598	*Emerald Green* (the gem)	**20**	**J**	**10**
18—	**EMERALD GREEN**^{P} (the pigment)	**26**	**C**	**11**
18—	*Emperor Green*			
1853	*Imperial Green* (impure, 18 B 9)			
18—	*Kirchberger Green*			
1800	Mitis Green			
1864	*Paris Green* (impure, 18 B 9)			
18—	*Paul Veronese Green*			
1814	*Schweinfurt Green*			
18—	*Vienna Green*			
1572	*Emeraude* (*Fr.* Emerald Gr) †	**20**	**J**	**10**
186-	**EMERAUDE**^{P} (Chrom. Ox., tr.) †	**28**	**K**	**11**
1892	Eminence^{T}..(F = 47 J 6)	**45**	**L**	**11**
18—	*Emperor Green*^{P} (Emerald Gr)	**26**	**C**	**11**
1916	Empire^{T}	**20**	**B**	**12**
1915	**EMPIRE BLUE**^{T}	**36**	**J**	**8**
1912	Empire Green	**23**	**E**	**9**
1835	Empire Red^{B} (Imit. Ver.)			
1912	Empire Yellow^{R}	**9**	**K**	**3**
155-	*Enamel Blue*^{P} (Smalt)	**43**	**D**	**11**
1921	Endive^{T}	**17**	**L**	**3**
1905	Endive Blue^{R} +	**43**	**B**	**5**
1700	*English Blue*^{P} (Verditer Bl)	**36**	**K**	**7**
180–	*English Green*^{P} (Scheele's Gr)	**19**	**L**	**8**
1923	English Green^{T}	**24**	**A**	**12**
1925	English Grey^{T}	**15**	**C**	**2**
1654	*English Inde*.(Indigo)			
1927	English Ivy^{T} +	**23**	**A**	**12**
1927	English Oak^{T}	**15**	**A**	**10**
1703	*English Pink*^{P} (Stil de grain Y)	**10**	**K**	**2**
17—	English Red^{P} (iron oxide)	**4**	**H**	**12**
17—	*Crowshay Red*			
17—	*Forest of Dean Red*			
1705	*English Red*^{T} (Madder)	**2**	**J**	**11**
17—	*English Red*^{P} (Colcothar)	**7**	**L**	**11**
18—	*English Sky Blue*^{P} (laundry blue)			
	ENGLISH VERMILION^{P}	**3**	**L**	**10**
1928	English Violet^{T}	**44**	**K**	**9**
1920	**ENSIGN**^{T}	**40**	**J**	**12**
1892	*Epinauche*^{F}	**31**	**H**	**4**
1892	*Epsom*^{T}	**20**	**I**	**6**
1922	Erin^{T}	**29**	**F**	**12**
18—	*Erlangen Blue*^{P} (Prussian Bl)			
18—	*Erlau Green*^{P} (Malachite Green)	**28**	**A**	**9**
1895	*Escadre*^{T} (*Fr.* Squadron)	**37**	**G**	**10**
1726	*Eschel Blue*^{P} (Smalt)	**43**	**D**	**11**
1921	Eskimo^{T} +	**7**	**H**	**11**
1845	*Esterhazy Grey*		?	
1892	*Esthetic Grey*^{F}	**30**	**C**	**1**
1912	Etain Blue^{R}.(*Fr.* Tin)	**26**	**F**	**1**
1892	*Etang*^{T}......(*Fr.* Pond)	**28**	**B**	**2**
1919	Ether^{T}	**35**	**K**	**2**
1845	Ethereal Blue.(Sky Blue)	**33**	**E**	**6**
15—	Eton Blue + †	**35**	**J**	**1**
1919	Etruscan^{T} +	**7**	**H**	**12**
1905	Etruscan Red	**4**	**G**	**11**
1905	Eucalyptus [Green]	**20**	**C**	**1**
1912	Eugenia Red^{R}	**3**	**K**	**2**
1924	Eugenie^{T}	**45**	**F**	**5**
1912	Eupatorium Purple^{R}	**43**	**J**	**4**
1892	*Eureka Red*^{F}	**7**	**H**	**4**

1926	Eve Green ^{T}	18 L 1
1926	**EVENGLOW** ^{T}	45 C 8
1705	*Evening Grey* ^{T} (Twilight Grey)	?
1927	Eventide ^{T}	42 C 6
1892	*Évêque* ^{F} . . . . (*Fr.* Bishop)	45 J 9
1923	Everglade	32 L 4
1915	**EVERGREEN**	24 E 12
18—	*Extract of Vermilion* †	
1928	Faded Rose ^{T}	5 I 9
1923	Faience ^{T}	35 L 5
1924	Fairway ^{T}	32 J 12
1892	Fairy [Green] ^{T}	20 A 7
1895	*Fakir* ^{T}	10 B 5
1920	Falcon ^{T}	8 J 10
1000	**FALLOW**	12 B 5
1925	Fandango ^{T}	52 L 10
18—	Faon . . . . (*Fr.* Fawn)	14 A 7
1898	Fashion Gray ^{B} —	48 A 1
1789	**FAWN** [Brown]	14 A 7
1923	Feldspar ^{T}	27 I 9
1924	Fern ^{T}	21 I 7
1902	Fern Green	21 F 5
1656	Ferruginous	5 D 12
1577	*Fesse, Fess* (light or sky blue)	
1883	Feuille ^{T} (*Fr.* Autumn)	14 B 10
1690	Feuille Morte † (*Fr.* Dead Leaf)	5 A 12
1640	*Folimort*	
1647	*Fieulamort*	
1655	*Philamot*	
1657	*Phyliamort*	
1681	*Philomot*	
1698	*Phyllamort*	
1702	*Feulamort*	
1745	*Filemot*	
1844	*Philimot*	
1847	*Fillemot*	
1925	Fez ^{T} +	5 L 4
1590	Fiery Red	1 I 12
1923	**FIESTA** ^{T}	1 I 10
1916	Filbert [Brown] (Hazel †)	13 J 9
1884	Fir [Green]	24 E 7
1926	Firecracker ^{T}	1 H 12
1892	Firefly ^{T} . . . . (F = 6 H 11)	1 K 10
1382	Fire Red	1 F 12
1789	*Fire Scarlet* ^{T} (Cochineal)	1 L 10
1923	Fireweed ^{T}	44 L 10
1922	Firmament ^{T} (See † Sky Bl)	36 D 7
1915	Firmament Blue ^{B} (See † Sky Bl)	35 H 4
1705	*Fish Grey* ^{T} . . . (*Cod Grey*)	16 C 7
1918	Flag ^{T}	46 I 12
1590	Flame [Scarlet] †	1 D 12
1928	Flame Blue ^{T}	45 G 11
1927	Flaming Maple ^{T}	4 L 5
1898	Flamingo	2 I 11
1656	Flammeous . . . (Flame)	1 D 12
1751	*Flander's Blue* ^{P} (Green Ashes, †)	
1927	Flash ^{T}	3 K 11
1666	Flavous . . . . (*Ln.* Yellow)	
1915	**FLAX**	12 B 2
1602	Flaxen	12 B 2
1804	*Flaxen Grey* ^{M}	?
1705	*Flax-flower Blossom* ^{T}	36 F 7
1814	Flax-flower Blue ^{R}	42 A 8
1705	*Flax Grey* ^{T}	?
1776	Flea . . . . (Puce)	7 H 4
1923	**FLEMISH BLUE**	39 E 10
1611	**FLESH** †	11 B 2
1926	Flesh Blonde ^{T}	4 A 9
	Flesh Ochre ^{P}	10 A 8
1882	**FLESH PINK** †	
1814	*Flesh Red*	
1924	Fleur-de-Lys ^{T}	42 H 7
1925	Flint ^{T}	56 B 1
1000	Flint Grey †	14 A 1
1928	Flirt ^{T}	2 K 9
1705	*Flock Red* ^{T} (Nacarat de Bourre)	
18—	*Florence Brown* ^{P}	6 K 4
17—	*Florence Earth* ^{P} (Colcothar)	7 L 11
1923	Florentine ^{T}	1 C 12
1822	*Florentine Lake* ^{P} (Carmine)	3 K 5
1527	*Florey Blue* ^{P} (<*Fr. florée*, poor indigo)	
1926	Floride Gold ^{T}	10 L 8
1905	Floss Flower Blue (Ageratum Bl)	43 C 3
1600	*Flower de Luce Green* †	22 D 8
1912	Fluorite Green ^{R}	19 D 9
1912	Fluorite Violet ^{R}	46 L 12
1922	Fog ^{T} †	35 A 2
1902	Fog Blue ^{B} †	
1902	Foliage Brown	5 A 12
1892	Foliage Green † (in sunlight)	20 J 5
1928	Folkstone ^{T}	13 A 3
1920	Folly ^{T}	2 J 6
1926	Fontainebleau ^{T}	54 D 1
1921	Forest ^{T} +	24 A 11
1806	*Forest Brown* ^{T}	?
1810	Forest Green —	23 L 6
17—	*Forest of Dean Red* ^{P} (English Red)	4 H 12
1877	Forget-Me-Not [Blue]	36 G 4
1921	Formosa ^{T}	12 A 8
1925	Forsythia ^{T}	9 K 6
1796	Fox ^{T}	14 K 8
1920	Foxglove ^{T}	42 H 9
1925	Fox Trot ^{T}	27 K 1
18—	Foxy (reddish brown)	
1923	Fragonard ^{T}	4 K 3
1919	France ^{T}	38 B 12
1926	France Rose ^{T}	1 F 4
1919	Freedom ^{T}	46 A 12
1600	Freestone +	10 B 3
1927	**FRENCH BEIGE** ^{T}	13 A 7
1727	*French Berries* ^{V} (Persian Berries)	10 L 6
1858	**FRENCH BLUE** ^{P} (Art. Ult.)	41 F 12
1618	French Green (F = 19 B 10)	29 D 8
1814	**FRENCH GREY** †	28 C 1
	French Lilac ^{T}	44 H 7
1892	*French Maroon* ^{F}	6 J 4
1925	**FRENCH NUDE** ^{T} +	12 A 6
	French Ochre ^{P} (Yellow Ochre)	11 L 7
1862	*French Pink*	10 F 4
1857	*French Purple* ^{V} (Orchil)	
1844	*French Red* . . . . (Rouge)	
1705	*French Scarlet* ^{T} (Kermes)	1 L 12
1826	French Ultra. ^{P} (Art. Ul.)	41 F 12
	FRENCH VERMILION ^{P}	2 J 12
186-	French Veronese Green ^{P} (Chrom. Ox., tr.)	28 K 11
1845	*French White*	42 B 2
1766	**FRENCH YELLOW** ^{M}	12 L 9
1921	Friar ^{T} +	8 L 12
1594	*Friar's Grey* ^{T}	?
1657	Frost Grey ^{T}	46 A 2
1928	Frosty Green ^{T} +	31 E 7
1892	**FUCHSIA** ^{T} . . (F = 55 J 6)	50 I 12
1928	Fuchsia, Antique ^{T}	42 L 8
1922	Fudge ^{T} +	7 C 12
1921	Fujiyama ^{T} —	5 E 11
1866	Fumous (< *Ln.* smoke †)	
1662	Fuscous +	7 C 7
1821	*Fustet* ^{V} (young Fustic)	9 L 5
1545	Fustic ^{V} [Old]	11 L 5
15—	*Yellow Brazil Wood* ^{V}	
15—	Yellow Wood ^{V}	
1821	*Fustic, Young* ^{V}	9 L 5
1902	Gage Green	22 E 6
1921	Gaiety ^{T} —	2 K 8
1927	Galleon ^{T} +	8 J 9
1764	Gallstone ^{P}	10 L 4
	Gambia ^{V} . . . . (Catechu)	7 C 11
1634	Gamboge ^{P}	10 K 5
1926	Gardenia Green ^{T}	31 H 6
1922	Gargoyle ^{T}	16 C 1
1928	Garland Green ^{T}	22 H 7
1783	**GARNET** +	7 J 6
1905	Garnet Brown ^{R}	6 L 9
1926	Garnet Red ^{T}	6 K 6
1669	*Garter Blue* ^{T}	46 B 10
	Gaude Lake ^{P} (*Fr.* Gaude = Weld)	10 J 2
13—	*Gaudy Green* ^{T} †	22 K 7
1837	*Gay Green* ^{T} † (Parrot Gr)	21 L 6
1885	Gazelle [Brown] —	15 C 7
1921	Geisha ^{T}	43 I 3
1884	Gendarme [Blue] †	37 K 2
1598	*Generall* ^{P} (<*Fr.* Jaune réalgar, Orpiment)	10 K 3
	Genestrole (Broom)	11 J 1
	Genet . . . . . (Broom)	11 J 1
1927	Geneva Blue ^{T}	47 C 12
1928	Genista ^{T}	9 J 8
1928	Genoa Blue ^{T}	37 K 6
1865	Gentian Blue	43 D 10
1925	Gentian ^{T}	35 C 8
1842	**GERANIUM** (F = 3 K 8)	2 K 10
187-	Geranium Lake ^{P}	2 L 10
1925	Geranium Petal ^{T}	1 K 12
1886	Geranium Pink ^{R}	1 J 8
1919	Ghent ^{T}	40 J 9
1728	*Giallolini, -no* ^{P} (Naples Y)	10 F 3
1919	Gigas ^{T}	43 J 7
1789	*Gillyflower* ^{T} (a purple)	?
1365	Gilt, gild, gilded (Golden Y)	10 L 7
1552	Ginger ^{T}	6 D 12
1611	*Gingerline* ^{T} . . (Ginger)	6 D 12
1657	*Gingeline*	
1666	*Gingeoline, Gingioline*	
1927	Gingerspice ^{T} —	7 H 11
1828	*Giraffe* ^{T}	13 C 9
1921	Glacier ^{T}	39 J 8
1926	Glacier Blue ^{T} —	39 H 7
1918	Gladiolus ^{T}	2 K 5
1892	*Glaïeul* ^{T} (*Fr.* Gladiolus)	3 F 9
1790	Glass Green	18 F 3
1654	*Glass Grey* ^{P}	34 B 2
1671	Glaucous †	19 B 3
1886	Glaucous-Blue ^{R}	36 I 3
1886	Glaucous-Green ^{R}	27 B 5
1912	Glaucous-Grey ^{R}	35 B 2
1928	Glint o' Gold ^{T}	11 K 4
1923	Gloaming ^{T}	4 H 2
1918	Glory ^{T}	44 G 12
1892	*Glowworm* ^{T} (see † Luciole)	20 K 3
1917	Gloxinia ^{T}	43 L 10
1828	*Gmelin's Blue* ^{P} (Art. Ultra.)	41 F 12
1912	Gnaphalium Green ^{R}	28 A 4
1705	Goat ^{T}	15 C 5
1892	**GOBELIN [BLUE]** (F = 37 C 6)	37 I 5
190-	Gobelin Green	30 H 9
1789	*Goblin Scarlet* ^{T} (Cochineal)	1 L 10
1400	**GOLD** †	14 K 7
1892	Gold Bronze ^{F}	15 H 12
1915	**GOLD BROWN** ^{T}	14 F 12
	Gold Earth ^{P} (Yellow Ochre)	11 L 7
1925	Gold Leaf ^{T}	11 K 8
1920	Gold Pheasant ^{T}	13 L 12
1662	Gold Yellow †	10 L 7
1300	Golden (gold, the metal)	14 K 7
1423	Golden . . . . . (blond)	13 G 6
1891	**GOLDEN BROWN** ^{M}	14 F 12
1865	Golden Chestnut ^{T} +	14 A 9
1928	Golden Corn ^{T}	9 I 6
1905	Golden Feather Yellow (Pyrethrum Y)	11 L 2

1922	Golden Glow^{T} †	9	L	6
1830	Golden Green †	12	K	3
	Golden Ochre^{P} (Roman Ochre)	11	K	9
1927	**GOLDEN POPPY**^{T}	9	L	12
1871	Golden Red †			
1915	**GOLDEN ROD**^{T} †	10	L	5
1926	Golden Wheat^{T}	11	D	7
1597	**GOLDEN YELLOW** †	10	L	7
1925	**GOLF GREEN**^{T}	21	B	12
1916	**GOLF [RED]**^{T}	3	L	11
1693	*Goose-Grey*	16	A	11
1916	Gooseberry^{T}	55	H	9
1927	Gooseberry Green^{T}	21	A	8
1925	Gorevan^{T}	7	C	11
1600	*Gosling Green*		?	
1892	*Goura*^{T} —	47	E	9
13—	*Goulez, gowlis* (Gules: Red)			
1925	**GOYA**^{T}	3	L	10
13—	*grain, in grain*^{T} (Kermes dye)...	1	L	5
1925	**GRAIN**^{T} +	11	B	5
1924	Granada^{T}	8	H	6
1662	*Granat, -flower*^{T} (Pomegranate)..	1	J	12
1902	Granite + †			
1892	*Granite Blue*	44	A	2
1916	Grape^{T}	47	J	12
1928	Grape Blue^{T}	46	I	12
1893	Grape Green^{R}	21	J	1
1921	Grapejuice^{T} +	44	L	10
1924	Grapefruit^{T}	19	L	1
1928	Grapenuts^{T} +	14	B	10
1915	**GRAPHITE**^{T} +	48	C	7
700	**GRASS GREEN** †	21	L	5
1928	Grasshopper^{T}	20	F	6
1925	**GRAVEL**^{T}	13	A	4
700	**GRAY**			
1335	*Grayn* (*grain*, Kermes dye)	1	L	5
1920	**GREBE**^{T} +	55	A	2
1661	*Grecian*		?	
1927	**GRECIAN ROSE**^{T}	3	F	9
700	**GREEN**			
17—	*Green Ashes*^{P} (Cendre Gr. †)			
1588	*Green Bice*^{P} (Malachite)..	28	A	9
	Green Ochre (Terre Verte)			
1794	Green Earth^{P} (Terre Verte)			
1705	*Green Finch*^{T} +	14	L	5
1902	Green Slate^{M}	31	C	5
1902	Green Stone^{M}	20	D	2
1928	Grège^{T} (*Fr.* raw, unbleached).....	15	A	3
1928	Grège, Light^{T} (See † Ecru)	13	A	2
1905	Grenadine Red^{O} †	1	D	11
1851	Grenat + (*Fr.* Garnet)....	7	J	6
190–	Gretna Green	29	E	8
700	**GREY**			
1925	**GREY 31**^{T}	15	C	6
1927	Grey Dawn^{T}	45	B	2
1892	Grey Drab^{T}	21	B	1
182–	Grey Stone^{M}	13	A	2
1335	*Greyn* (*grain*, Kermes dye)	1	L	5
1640	Gridelin (*Fr.* flax grey)...	53	K	5
	Gris-de-lin			
1924	Griffin^{T}	47	A	3
1386	Gris.........(*Fr.* Grey)			
1607	*Grisard*......(greyish)			
1425	*Grisel, grizzle*. (Grey)			
1819	Griseous.....(Grey)			
176–	*Gros bleu*^{D} (Indigo or Woad)			
1921	**GROTTO [BLUE]**^{T}	34	L	2
1920	Grouse^{T} +	15	C	7
1859	*Guignet's Green*^{P}	29	L	9
186–	*Mittler's Green*^{P}			
1826	*Guimet's Blue*^{P} (Art. Ultra.)....	41	F	12
1912	Guinea Green^{R}	27	L	9
1918	Guinea Hen^{T}	16	C	4
1440	Gules^{H}......(Red)			
13—	**GULL**	53	A	1
1912	Gull Grey^{R}	36	A	3
187–	**GUNMETAL** †	48	C	2
1928	Gunmetal, Light^{T}	47	A	2
1921	Gypsy^{T}	6	B	12
1927	Gypsy Red^{T}	5	I	6
1912	Haematite Red^{R}	7	H	3
1766	Hair Brown	15	A	4
1925	Hamadan^{T}	13	C	4
18—	*Hamburg Blue*^{P} (Prussian Bl)			
18—	*Hamburgh Lake*^{P} (Carmine)	3	K	5
1926	Hampstead Brown^{T} +	7	E	9
1922	Hankow^{T} +	40	J	11
1927	Harbor Blue^{T}	38	H	6
1923	Harlequin^{T}	17	K	11
171–	*Harlem Blue*^{P} (Antwerp Bl).....	36	L	8
189–	Harrison Red^{P}	2	L	11
1928	**HARVARD CRIMSON**^{T}	5	J	6
1923	**HARVEST**^{T}	12	H	9
1912	Hathe Grey^{R}	37	C	1
1923	Hathor^{T}	43	D	12
1875	Havana [Brown] †			
1927	Havana Rose^{T}	6	K	9
700	*Haw* (dull leaden blue)			
1902	Hay	12	I	2
1592	**HAZEL** †	13	J	9
1905	Hazelnut....(Noisette)..	13	J	9
1902	Hazy Blue^{M}	27	B	6
1705	Heartsease^{T}. (Pansy †)			
1918	Heather^{T} †	45	K	1
1885	*Heather* (Mixed or speckled)			
1892	*Hebe*^{T}	4	J	4
182–	Hedge Sparrow Egg^{B} †			
1882	**HELIOTROPE**	54	C	10
1912	Heliotrope Grey^{R}	44	C	3
1905	Hellebore Green^{R}	23	L	3
1912	Hellebore Red^{R}	4	C	5
1919	Hemlock^{T}	32	H	12
1917	Hemp^{T}	14	H	4
1613	**HENNA**	6	J	12
1646	*Alcanna*^{V}			
1921	Hepatica^{T}	42	K	8
1905	Hermosa Pink	1	B	3
1916	Heron^{T}	46	B	8
182–	Hibernian Green^{B} +	22	L	11
1927	Highland Green^{T} —	32	L	5
1920	Hindu^{T} +	8	J	9
1928	Hispano^{T}	14	D	12
900	Hoar........(Grey)			
1916	Hockey^{T}	3	K	6
	Holland Blue	39	E	11
1789	*Holland Violet*^{T} (a deep V)		?	
1923	Holly Berry^{T}	4	L	10
1898	Holly Green +	23	L	1
18—	*Holly Green*^{P} (*Holy Green*)			
1922	**HOLLYHOCK**^{T}	53	L	11
1922	Hollywood^{T}	5	K	5
1598	*Holy Green*^{P} (Terre Verte)			
1928	**HOMAGE BLUE**^{T}	47	E	12
1611	**HONEY [YELLOW]**	12	J	6
1928	Honey Beige^{T} +	11	C	6
1918	Honey Bird^{T}	33	L	2
1925	**HONEYDEW**^{T}	9	B	8
1921	Honeysuckle^{T}	12	D	6
1928	Honeysweet^{T}	11	J	6
182–	Hooker's Green No. 1^{P}..	20	L	10
182–	Hooker's Green No. 2^{P}..	29	J	11
1924	Hopi^{T} +	13	A	7
18—	*Horace Vernet's Blue*^{P} (Oil Blue)	42	E	12
1905	**HORIZON**^{T} **[BLUE]** (see † Sky)	25	A	4
1858	Horsechestnut	8	J	5
1905	*Hortense Blue*^{P} (Prussian Bl)			
1912	Hortense Violet^{R}	41	I	8
1905	Hortensia, Rose^{O}	3	C	9
1917	Hortensia^{T}	47	L	12
1920	Huckleberry^{T} +	47	J	11
1917	Hudson Seal^{T}	8	A	9
1920	Hummingbird^{T} (see † Colibri).....	28	L	7
1598	*Hungarian Blue*^{P} (Azurite Bl)....	36	K	7
1729	*Hungarian Green*^{P} (Malachite)	28	A	9
18—	**HUNTER [GREEN]** †	24	C	11
1892	Hunter's Green	24	C	11
1919	Huron^{T}	28	J	2
1922	Hussar^{T}	38	D	9
1920	Hyacinth^{T}	42	F	7
1704	Hyacinth Red	4	F	11
1388	Hyacinth Blue	44	H	12
1388	Hyacinth Violet	43	K	9
1656	Hyacinthine (Hyacinth R or V)			
1899	Hydrangea Blue^{T}	35	B	7
1905	Hydrangea Pink	2	E	7
1912	Hydrangea Red^{R}	6	K	1
1920	Hydro^{T}	37	G	8
1869	*Hypernic Red*^{V} (beechwood)	5	L	6
1912	Hyssop Violet^{R}	44	G	7
1835	*Hypocastanum*^{P} (Horsechestnut)			
	(Hippocastanum)			
1382	*Iacynct*......(Hyacinth)			
1609	Ianthine.....(Violet)			
1927	Ibis Pink^{T}	1	B	10
1892	*Ibis Red*^{F} —	8	A	6
1921	Iceberg^{T}	36	H	4
	IMITATION VERMILION^{P} (see Ver., Imit.)			
1928	Immensee^{T}	37	H	2
1926	**IMPERIAL**^{T}	45	L	10
182–	Imperial Blue	37	C	12
1853	*Imperial Green*^{P} (Emerald Gr)....	18	B	9
1927	Imperial Jade^{T} (see † Jade)	21	L	12
1814	Imperial Purple	45	G	10
1914	Imperial Red^{P} (Imit. Ver.)			
	Imperial Scarlet^{P} (Imit. Ver.)			
190–	Imperial Stone^{B} —	14	K	7
1881	*Imperial Yellow*^{P} (Yellow Ochre)	11	L	7
1924	Inca Gold^{T}	11	J	7
1622	Incarnadine..(Flesh)			
1573	*Indebaudias*..(Indigo)....	47	E	10
1300	*Inde Blue*....(Indigo)....	47	E	10
1927	**INDEPENDENCE**^{T}	47	H	12
1920	India Buff^{M}	12	E	5
	India Ink^{P}	16	A	2
1923	India Red^{T}	7	L	6
1927	India Spice^{T}	13	B	8
1925	India Tan^{T} —	7	C	12
1921	Indian^{T}	12	C	12
183–	*Indian Blue*^{T} (Indigo)...	47	E	10
1902	Indian Brown^{M}	8	E	12
12—	Indian Lake^{P}	53	K	6
1925	**INDIAN ORANGE**^{T}	1	D	12
1902	Indian Pink^{B}	3	D	9
1886	Indian Purple^{P}	47	J	2
16—	**INDIAN RED**^{P} (see † Oxide R)...	6	L	12
	Chinese Red			
	Iron Red			
	Japanese Red			
	Majolica Earth			
	Naples Red			
1735	*Persian Earth*			
	Persian Red			
1835	*Prussian Red*			
1764	*Scarlet Ochre*			
1549	Spanish Brown			
17—	*Indian Red*^{P}. (Bole)......	5	F	11
1727	*Indian Saffron*^{V} (Turmeric)	10	J	2

1899	*Indian Silk* (yellow green)	?
188-	Indian Tan ^{M}	13 I 8
1927	Indian Turquoise ^{T}	28 L 2
1735	Indian Yellow ^{P}	10 K 7
17—	Piuri, Piuree	
17—	Purrea Arabica	
17—	Purree	
1916	**INDIANA** ^{T}	49 L 7
1599	Indico (Indigo)	47 E 10
1289	**INDIGO**	47 E 10
1654	*English Inde*	
1573	*Indebaudias*	
1300	*Inde Blue, Indy Blue*	
183-	*Indian Blue*	
1599	*Indico*	
1740	Indigo Carmine	36 L 7
1743	*Chemic Blue*	
1740	Indigo Extract	
1753	*Saxon, —y Blue*	
1923	Indo ^{T}	38 I 8
1925	Infanta ^{T}	35 J 9
1918	Infantry ^{T}	36 I 4
1669	*Infernal Blue* ^{T}	47 E 12
1895	Ingenue ^{T}	19 A 3
1814	*Ink Black*	40 C 7
1928	Ink Blue ^{T} +	47 A 11
	Intense Blue (refined Indigo)	45 F 12
1925	International ^{T}	38 I 9
1844	Invisible Green (R = 31 L 2)	32 C 12
1928	Ionian Blue ^{T}	40 L 6
1916	**IRIS** ^{T}	43 B 5
1928	Irisglow ^{T}	44 B 3
1835	*Iris Green* ^{P} (Malachite)	28 A 9
186-	*Iris Green* ^{P} (Flower de Luce †)	22 D 8
1926	**IRIS MAUVE** ^{T}	3 B 7
1693	Iron	8 E 9
1697	Iron Blue	47 A 4
	Iron Brown ^{M} (Mineral Brown †)	
1851	Iron Brown . . (Iron)	8 E 9
17—	*Iron Buff* ^{T}	11 D 5
	Iron Crocus ^{P} (Bole)	5 F 11
1000	Iron Grey —	24 A 2
185-	Iron Minium ^{P}	7 H 8
	Iron Oxide Red ^{P}	6 G 12
	Iron Saffron ^{P} (Bole)	5 F 11
1860	*Iron Yellow* ^{P} (Mars Yellow)	11 L 9
1601	Isabella	13 K 7
1925	Ispahan ^{T}	40 L 3
1912	Italian Blue	33 L 4
	Italian Earth, Burnt ^{P} (Bt Sienna)	5 F 12
	Italian Earth, Raw ^{P} (Raw Sienna)	13 L 10
	Italian Green ^{P} (Terre Verte)	
	Italian Lake ^{P} (Quercitron)	11 L 7
	Italian Ochre ^{P} (Raw Sienna)	13 L 10
17—	Italian Pink ^{P} (Stil de Grain Y)	10 K 2
1928	Italian Straw ^{T}	15 D 2
1385	**IVORY [YELLOW]**	10 B 2
1634	Ivory Black ^{P}	
180-	*Ivory Brown* ^{P}	8 C 12
1595	Ivory White (Ivory)	10 B 2
1902	Ivy [Green] †	16 L 9
1382	*Jacinthe* (Hyacinth B or V)	
1572	*Jacinthe* ^{H} . . . (Tawny)	
1928	Jacinthe ^{T}	10 I 9
1892	*Jacaranda Brown* ^{F} — (Rosewood †)	16 A 12
1924	Jack Rabbit ^{T}	39 A 2
1917	Jack Rose ^{T}	3 J 6
1892	*Jacqueminot* ^{T}	3 K 9
1892	Jade [Green] †	
1925	**JADEITE** ^{T} . . . . . . (Jade †)	
1928	Jadesheen ^{T} +	22 A 7
1899	*Jaffa Orange*	11 C 10
1925	Jaffi ^{T}	47 A 1
1926	Jalapa ^{T}	5 C 11
1916	**JAPAN BLUE** ^{T}	39 E 12
1741	*Japan Earth* ^{P} (Catechu)	7 C 11
1912	Japan Rose ^{R}	3 A 10
1892	Japanese Blue ^{B} +	30 J 2
1892	*Japanese Green* ^{F} +	30 J 2
1905	Japanese Yellow (Chinese O)	9 D 12
1926	Japonica ^{T}	4 J 2
1925	**JASMINE** ^{T}	9 K 4
1892	Jasper ^{T} (F = 32 E 1 +)	32 H 9
1905	Jasper Green	29 H 7
1912	Jasper Pink ^{R}	2 I 8
1912	Jasper Red ^{R}	3 J 10
1921	Java ^{T} +	8 L 10
1928	Java Brown ^{T}	8 J 8
1912	Javel Green ^{R} (Eau-de-Javel S)	19 L 2
1912	Jay [Blue]	36 G 8
1892	*Jean Bart* ^{T}	47 H 12
188-	Jersey Cream ^{M} +	9 B 2
1450	Jet Black	
17—	*Jew's Pitch* (Asphaltum)	8 H 11
1921	Jockey ^{T}	5 J 6
1926	Jockey Club ^{T} †	
1789	Jonquil [Yellow]	9 J 5
1926	Josephine ^{T}	12 A 7
1912	Jouvence Blue ^{R} (*Fr.* youth)	37 L 2
1705	*Jujube* ^{T}	?
1892	*Judee* ^{T}	44 E 6
1926	*June Rose* ^{T}. (see † Rose)	
1926	**JUNGLE GREEN** ^{T}	32 L 12
1919	Juniper ^{T}	31 H 4
1925	Kabistan ^{T}	31 H 5
1928	Kaffa ^{T}	7 E 9
1912	Kaiser Brown ^{R}	6 D 12
1602	*Kane-colored* (*Cain-colored*)	
1919	Kangaroo ^{T}	16 C 6
1924	Kara ^{T}	38 L 1
1925	Kara Dagh ^{T}	56 A 2
1928	Kasha-Beige ^{T}	14 A 2
1922	Kashan ^{T}	36 L 4
1925	Kashmir ^{T}	30 E 8
1782	*Kasseler Yellow* ^{P} (Turner's Y)	10 K 3
1925	Kazak ^{T}	7 L 9
1514	*Kendal Green* ^{T}	?
188-	Kentucky Green ^{M} +	22 H 12
1925	Kermanshah ^{T}	7 C 10
1626	Kermes ^{A} (see † Scarlet)	1 L 12
1626	*Alkermes*	
1705	*French Scarlet*	
1676	*Kermes Berries*	
1386	*Scarlet in grain*	
15—	*Venetian Scarlet*	
1676	*Kermes Berries* ^{A} (Kermes)	1 L 12
1920	Kettledrum ^{T}	7 L 10
1848	Khaki †	13 J 7
1925	Khiva ^{T}	3 I 12
1912	Kildare Green ^{R}	19 I 5
1912	Killarney [Green]	20 A 9
190	Kinema Red ^{B}	3 L 10
1919	Kingfisher ^{T}	39 L 10
155-	*King's Blue* ^{P} (Smalt)	43 D 11
1669	*King's Blue* ^{T}	45 A 10
1912	King's Blue ^{R}	34 G 7
1705	*King's Colour* ^{T} (a dark violet)	?
1789	*King's Purple*	
1761	King's Yellow ^{P} (Orpiment)	10 K 3
18—	*Kirchberger Green* ^{P} (Emerald Gr)	26 C 11
1925	Kis Kilim ^{T}	7 C 12
1924	Kobe ^{T}	6 K 12
1917	Kolinsky ^{T}	8 L 11
1606	*Korck* ^{V} . . . . . . (Orchil)	
1925	Korea ^{T}	5 J 11
1922	Kremlin ^{T}	29 L 6
1912	Kronberg's Green ^{R}	22 K 2
1925	Kurdistan ^{T}	48 A 10
1924	Kyoto ^{T}	9 B 10
1892	*Labrador* ^{T} —	40 J 8
1899	*Laburnum Yellow* ^{T}	?
1553	Lac, Lacca ^{A}	
1790	Lac-dye ^{A} . . . . (scarlet)	1 L 11
12—	Lac Lake ^{P} (Indian Lake)	53 K 6
1925	**LACQUER RED** ^{T}	4 K 11
1905	Laelia Pink ^{R}	43 G 2
1905	La France Pink ^{R}	1 G 7
1920	Lagoon ^{T}	26 K 2
1598	Lake . . . . (Carmine)	3 K 5
1588	Lake †	
1928	Lake Blue ^{T}	37 J 2
1892	Lama ^{T} — . . . (F = 12 B 6)	16 A 11
18—	*Lambert's Blue* ^{P} (Azurite Bl)	36 K 7
	Lamp Black ^{P}	
1920	Lapis ^{T}	26 K 5
1924	Lariat ^{T}	12 C 6
1918	Lark ^{T}	12 B 3
1919	Larkspur ^{T}	35 K 5
1656	Lateritious . . (Brick Red)	6 B 11
1658	Latericeous	
1385	*Latten, Latoun* (Brassy)	11 L 6
16—	*Laundry Blue* ^{P} (Smalt)	43 D 11
1705	Laurel Green +	22 L 1
1927	Laurel Oak ^{T}	7 J 10
1916	**LAUREL PINK**	3 J 7
1892	Lava — . . . . . . (F = 13 K 9)	8 E 7
1926	La Vallière ^{T}	54 A 6
1858	**LAVENDER** †	43 C 5
1796	Lavender Blue	
1705	Lavender Grey	
190-	Lawn Green ^{M}	21 L 5
	Lead Ochre ^{P} (Massicot)	10 D 2
1385	**LEAD** †	55 A 2
1705	**LEAD GREY** †	13 C 1
1916	Leadville ^{T}	47 B 5
1902	Leaf Bud ^{B} †	
1891	Leaf Green †	
	Leaf Red ^{V} (Carthamus Red)	1 L 11
1927	**LEAFMOLD** ^{T}	8 L 11
1892	Leather †	12 L 11
1902	**LEATHER BROWN** + †	14 A 10
1892	*Leather Lake* ^{M}	5 A 12
1658	Leek [Green] (see † Prasinous)	22 J 5
18—	*Leek Green* ^{P} (Sap Green)	22 K 1
1853	**LEGHORN**	10 D 4
1928	Legion Blue ^{T} +	46 B 11
	Leitch's Blue (Cyanine)	34 L 10
1857	*Leithner's Blue* ^{P} (Cobalt Blue)	34 L 7
1611	*Lemnian Earth* ^{P} (Bole)	5 F 11
	Lemnos Earth ^{P}	
1865	*Lemnian Ruddle* ^{P} (Bole)	5 F 11
1598	**LEMON [YELLOW]** †	10 K 3
1875	**LEMON CHROME** ^{P}	9 L 2
1884	Lettuce Green	20 L 5
1801	*Levant Red* ^{T} (Turkey Red)	4 L 9
18—	*Leyden Blue* ^{P} (Cobalt Bl)	34 L 7
1919	Liberia ^{T} +	8 J 7
1918	Liberty ^{T}	43 C 12
1927	Liberty Blue ^{T}	44 B 10
1897	Liberty Green ^{B}	19 I 4
1917	Lichen ^{T}	23 H 3
1898	Lichen Green	26 A 4
1925	Lido ^{T}	13 C 3
1892	Lierre ^{T} . . . . . (*Fr.* Ivy, †)	16 L 9
18—	**LIGHT RED** ^{P} (Burnt Ochre)	3 G 12
1775	**LILAC** †	3 G 7
1886	Lilac Grey ^{R} +	43 B 2
1855	Lilaceous . . . . (Lilac)	3 G 7
1905	Lilas . . . . (*Fr.* Lilac)	3 G 7
1925	Lilium ^{T}	43 K 7

1912	Lily Green ^{R}	31	H	2
1928	Lily Green ^{T}	19	H	5
1310	Lily White			
17—	*Lime Blue* ^{P} (Verditer Blue)	36	K	7
1905	*Lime Green* ^{R} + † (Linden Gr)	20	J	1
19—	Lime [Yellow] †	11	L	5
1922	Limestone	15	A	4
1922	Limoges ^{T}	36	K	9
1510	**LINCOLN GREEN**	23	J	4
1905	*Lincoln Red* (Carthamus R)	1	L	11
1905	Linden Green †	19	J	1
1926	*Linden Yellow* ^{T} †	19	J	1
190–	Linoleum Brown ^{M} +	14	L	9
1918	Lint ^{T}	13	B	3
1839	*Lint-blossom* ^{T}		?	
1794	*Lint-white*....(Flaxen)	11	C	2
1551	Lion	13	G	7
1573	*Lion Tawny*..(Lion)	13	G	7
1927	Liqueur Green ^{T}	18	K	2
1912	Liseran Purple ^{R}	50	B	9
1912	Litho Purple ^{R}	44	I	8
1686	Liver +	7	H	9
1794	Liver Brown			
1892	*Liver Maroon* ^{F}			
1622	Livid †	55	A	2
1912	Livid Brown ^{R}	6	D	3
1912	Livid Pink ^{R}	51	D	1
1912	Livid Purple ^{R}	45	I	6
1905	Livid Violet †	4	G	1
1897	Lizard [Green]^{T}	28	F	7
1892	Lizard Bronze ^{F} +	14	L	2
1922	Loam ^{T} +	15	C	5
1918	Lobelia [Blue] ^{T}	42	J	12
1905	Lobelia Violet ^{R}	43	E	6
1789	Lobster	3	J	12
1926	Locarno Green ^{T}	20	A	11
1921	Loganberry ^{T} +	46	L	11
1923	Log Cabin ^{T} +	15	A	5
1581	Logwood ^{V} ++	48	E	12
15—	*Blue Wood* ^{V}			
15—	*Campeachy Wood* ^{V}			
15—	*Logwood Blue* ^{T}	40	C	8
1852	*Lo-kao* ^{V} (*Chinese Green*)	18	A	8
1530	*London Black* ^{T}		?	
1625	*London Blue* ^{T}		?	
1806	*London Brown* ^{T}	8	L	7
1566	*London Red* ^{T}		?	
1566	*London Russet* ^{T}		?	
1501	*London Scarlet* ^{T}		?	
1806	London Smoke ^{T} +	8	C	9
1922	Long Beach ^{T} +	12	B	4
1926	Longchamps ^{T}	5	A	9
1922	Lotus ^{T}	3	H	8
1924	Louis Philippe ^{T}	34	K	7
17—	*Louisa, -e Blue* ^{P} (Prussian Bl)			
18—	Louise, Bleu ^{T}	36	K	2
1895	Loutre ^{T} – ..(*Fr.* Otter †)	8	C	12
1919	Louvain ^{T}	38	I	6
1926	Love Bird ^{T}	18	L	6
1927	Love-in-a-Mist ^{T}	34	K	1
1928	Lucerne Blue ^{T}	35	B	8
1892	*Luciole* ^{T} † (*Fr.* Glow-worm)	37	B	6
1922	Lucky Stone ^{T}	34	G	6
1905	Lumiere Blue ^{R}	26	I	1
1905	Lumiere Green ^{R} †	18	I	5
1922	**LUPINE** ^{T}	34	D	7
1767	Lurid †			
1657	Luteous † (< *Ln.* lutum: weld)	11	K	1
1923	Luxor ^{T}	43	B	11
1300	*Lyard, lyart*..(Grey)			
1912	Lyons Blue ^{R}	42	C	12
1928	Lyon, Bleu de ^{T}	44	B	11
1926	Macaroon ^{T}	12	H	7
1000	*Madder* ^{V}....(as a dye)	2	J	11
1705	*English Red*			
1912	Madder Blue ^{R}	44	C	7
180–	**MADDER, BROWN** ^{P}	7	J	9
180–	Madder Carmine ^{P}	4	H	6
18—	**MADDER, CRIMSON** ^{P}	2	L	5
18—	*Madder Indian Red* ^{P} + (Tuscan R)	7	L	8
1822	Madder Lake ^{P} (Rose Madder)	1	J	4
18—	Madder, Orange ^{P}	9	L	11
1815	Madder, Pink ^{P} (Rose Madder)	1	I	4
1839	**MADDER, PURPLE** ^{P}	5	K	4
1727	*Madder Red* ^{T}	2	J	11
18—	Madder, Rembrandt's ^{P}	4	J	11
1807	**MADDER, ROSE** ^{P}	1	I	4
1822	Madder Lake			
182–	Pink Madder			
18—	Madder, Rubens ^{P}	4	K	11
18—	Madder, Scarlet ^{P}	1	H	8
1912	Madder Violet ^{R}	45	J	9
17—	*Madder, Yellow* ^{P} (Stil de grain Y)	10	K	2
1928	Madeleine Blue ^{T}	46	E	12
1917	Madonna ^{T}	37	K	9
1925	Madrid ^{T}	15	B	10
1925	Madura ^{T}	14	I	8
1860	**MAGENTA**	52	K	12
1927	Magenta Rose ^{T}	53	J	11
1925	Magnolia ^{T}	3	I	8
1925	Mahal ^{T} +	7	A	10
1737	**MAHOGANY** †	7	J	10
1892	Mahogany Brown			
1843	Mahogany Red			
1661	*Maiden's Blush*	3	D	9
1926	Maintenon ^{T}	3	D	10
1861	**MAISE** †	10	G	5
1922	Majolica ^{T}	38	K	9
1927	Majolica Blue ^{T}	39	H	11
1598	*Majolica Earth* ^{P} (Indian Red)	6	L	12
1926	Malabar ^{T} –	7	E	11
1925	Malacca ^{T}	12	C	4
12—	**MALACHITE GREEN** ^{P} †	28	A	9
1588	*Bice Green*			
1839	*Bremen Green*			
1601	*Chrysocolla*			
1843	*Copper Green*			
18—	*Erlau Green*			
1729	*Hungarian Green*			
1835	*Iris Green*			
1815	*Mineral Green*			
16—	Mountain Green			
17—	*Oil Green*			
18—	*Olympian Green*			
18—	*Shale Green*			
18—	*Tyrolese Green*			
1551	*Verditer Green*			
1919	Malaga ^{T}	7	L	1
1705	*Malaquen Green* ^{T}..(?)		?	
1925	Malay ^{T}	15	C	11
1920	Mallard ^{T}	38	L	7
1611	Mallow [Purple] †	51	I	3
1912	Mallow Pink ^{R}	49	A	7
1862	*Mallow Red* ^{T} (Mallow)	51	I	3
1926	Malmaison ^{T}	11	I	2
190–	Malmaison Rose ^{P}	2	H	6
1920	Manchu ^{T}	15	C	12
1922	Mandalay ^{T}	8	L	12
1883	**MANDARIN ORANGE** †	11	B	12
1923	**MANDARIN RED** ^{T} †	2	F	12
1841	*Manganese Brown* ^{P}	15	C	12
	Mineral Bister			
18—	Manganese Velvet Brown ^{P}...(Bt Umber)	15	L	12
187–	Manganese Violet ^{P}	42	J	8
187–	*Burgundy Violet* ^{P}			
187–	*Mineral Violet* ^{P}			
1868	*Nuremberg Violet* ^{P}			
187–	*Permanent Violet* ^{P}			
1926	Mango ^{T}	13	D	11
1892	Manila.......(F = 10 I 4)	12	C	5
1927	Manon ^{T}	6	A	9
1917	Manzanita ^{T}	7	L	10
1916	**MAPLE**	11	E	4
1922	**MAPLE SUGAR** ^{T}	14	J	8
1928	Maracaibo ^{T}	8	L	9
1921	Marathon	11	H	12
1520	Marble......(mottled)			
1590	*Marble*......(white)			
1928	Marble Green ^{T} –	32	L	7
1926	Marie Antoinette ^{T}	4	I	7
1822	*Marguerite* ^{T} (a dull Violet)		?	
1912	Marguerite Yellow ^{R}	10	C	3
1654	Marigold [Yellow] †	9	L	10
	Marygold			
18—	**MARINE** [**BLUE**] (see † Navy)	46	G	12
1918	Marine Corps ^{T}	39	A	11
1892	Marine Green –	31	H	10
1924	Maris ^{T}	39	L	1
1925	Marmora ^{T}	29	J	6
1927	Marocain ^{T} + (see † Morocco)	7	C	10
15—	*Marrone, Marone* (*It.* Spanish chestnut)	7	E	10
1789	**MAROON** + †	7	L	7
16—	Marron (*Fr.* Spanish chestnut)	7	E	10
1927	**MARRON GLACÉ** ^{T}	14	A	8
1835	Mars Brown ^{P}	7	A	12
1835	Mars Orange ^{P}	3	E	12
1835	Mars Red ^{P}	4	J	12
1835	Mars Violet ^{P}	7	L	6
	Mineral Purple ^{P}			
	Purple Ochre ^{P}			
1835	Mars, Yellow ^{P}	11	L	9
1860	*Iron Yellow*			
	Siderin Yellow			
1926	Marsala ^{T}	6	D	10
1927	Marsh Rose ^{T}	4	I	9
1926	Martinique ^{T}	13	K	11
1912	Martius Yellow ^{R}	9	I	1
1705	*Marygold Yellow* (Marigold)	9	L	10
1925	Mascara ^{T}	7	L	8
1892	*Mascot* ^{F} –	40	E	12
1472	*Massicot* [*Yellow*] ^{P}	10	D	2
1898	Mast Brown, -Colour ^{B}	12	L	10
1890	Mastic......(F = 15 C 2)	13	E	5
1895	Matelot ^{T} (*Fr.* Sailor, see † Navy)	45	B	12
1921	Matrix ^{T}	28	L	6
1856	Mauve (see † Mallow)			
1928	Mauve Blush ^{T}	12	A	3
1926	Mauve Castor ^{T}	55	E	2
1927	Mauve Dust ^{T}	46	C	2
1926	Mauveglow ^{T}	53	B	2
1856	*Mauveine*....(Mauve)			
1928	Mauverose ^{T}	7	E	5
1925	**MAUVE TAUPE** ^{T}	7	C	8
1912	Mauvette †	41	C	4
1926	Mauvewood ^{T} +	7	H	10
1928	Mavis ^{T}	13	B	5
1924	Maya	12	A	10
1923	Mayflower ^{T}	3	J	3
1927	Mayfair Tan ^{T} –	13	B	7
1918	May Rose ^{T} .(see † Rose)			
1686	Mazarine Blue	44	I	12
1789	Meadow [Green]	30	D	10
1922	Meadowbrook ^{T}	31	J	7
1924	Meadowgrass ^{T}	23	H	9
1921	Meadowlark ^{T} +	15	E	7
1927	Meadowpink ^{T}	5	A	5
1928	Meadowsweet ^{T}	4	J	8
1928	Meadow Violet ^{T}	51	A	9
1921	Mecca ^{T} –	7	H	12
1905	Medal Bronze ^{R} +	14	J	7
1905	Medici Blue	37	E	3
1926	Mediterranean ^{T}	27	L	4
1398	*Meline* (Quince Yellow)	11	L	3
1926	Meerschaum ^{T} +	13	B	4
1705	*Melilot* ^{T}.....(*Fr.* Clover)	51	C	7

1381	*Mellay, melle* (varicolored)	
1927	Mellowglow ^{T}	10 I 6
1928	Mellomauve	45 F 1
1892	Melon ^{T} (F + = 2 B 10)	2 D 10
1773	*Melon Yellow*	?
1923	Mephisto ^{T} —	3 K 10
1907	Mercury Red ^{B} (Imit. Ver.)	
1927	Merida ^{T} +	13 B 7
1918	Merle ^{T} ++ (*Fr.* Blackbird)	37 L 5
1916	**MERMAID** ^{T}	21 B 2
1806	*Merroon* ^{T} †	?
1924	Mesa ^{T}	14 B 9
1892	Mésange ^{F} (*Fr.* Titmouse)	36 F 1
1892	*Metal* ^{T}	44 A 2
1926	Metal Brown ^{T} +	7 H 10
18—	*Metallic Brown* ^{P} (Mineral Br)	
1928	Metallic Green ^{T}	15 L 6
1926	Metallic Grey ^{T}	46 B 1
1928	Métallique ^{T} —	15 C 3
1921	Mexican ^{T} +	12 L 9
1902	Mexican Red ^{M}	13 L 10
1924	Mexico ^{T}	5 D 11
1926	Miami Sand ^{T} +	13 B 3
1919	Michigan ^{T}	30 L 2
1912	Microcline Green ^{R}	25 C 4
1920	Middy ^{T}	38 D 12
1915	**MIDNIGHT** ^{T}	40 A 8
1926	Midnight Sun ^{T}	2 E 12
1923	**MIGNON** ^{T}	43 G 7
1927	Mignon Green ^{T} (*Fr.* dainty)	21 J 6
1885	**MIGNONETTE [GREEN]** (see † Reseda)	22 K 1
1900	*Mignonette Grey* ^{T}	?
1892	Mikado ^{T} . . (F = 4 F 5) . .	2 B 12
1912	Mikado Orange ^{R}	9 J 8
1912	Mikado Brown ^{R}	14 C 9
1928	Milano Blue ^{T} +	36 E 7
1000	Milk White †	9 B 1
	Milori Blue ^{P} (Prussian Blue)	
	Milori Green ^{P} (Chrome Gr)	
188–	Milwaukee Brick ^{M} +	9 E 3
1922	Mimosa ^{T}	10 J 2
1649	*Min* ^{P} . . . . (Minium)	
1928	Mindoro ^{T} +	13 A 8
1841	*Mineral Bister* ^{P} (Manganese Br)	15 C 12
17—	*Mineral Blue* ^{P} (Verditer Bl)	36 K 7
171–	*Mineral Blue* ^{P} (Antwerp Bl)	36 L 8
18—	*Mineral Brown* †	
1815	Mineral Green ^{P} (Malachite)	28 A 9
1890	*Mineral Grey* ^{P}	20 A 2
17—	Mineral Orange ^{P} (Orange Lead)	1 F 12
1912	Mineral Red ^{R}	6 J 3
1796	*Mineral Pitch* ^{P} (Asphaltum)	8 H 11
1835	Mineral Purple ^{P} (Mars Violet)	7 L 6
187–	Mineral Violet ^{P} (Manganese V)	42 J 8
17—	*Mineral Yellow* ^{P} (Y. Ochre)	11 L 7
1844	*Mineral Yellow* ^{P} (Turner's Y)	10 K 3
1928	Miniature Pink ^{T}	2 B 8
1926	Ming Green ^{T}	28 J 11
1398	*Minium* ^{P} (Vermilion)	
1650	Minium ^{P} (Red Lead)	1 I 12
1695	*Minim, -e* ^{T} †	
1920	Mint ^{T}	29 L 10
1925	Minuet ^{T}	41 C 8
1922	Mirabelle ^{T} (*Fr.* yellow plum)	10 J 7
1927	Mirador ^{T}	8 L 6
1927	Mirage ^{T} +	11 B 4
1899	**MIST [GREY]** ^{T}	53 B 1
190–	Mist Blue ^{M}	27 B 6
1922	Misty Blue ^{M} (Mist Blue)	27 B 6
1928	Misty Morn ^{T}	5 C 7
1922	Mistletoe ^{T}	22 B 5
1800	Mitis Green ^{P} (Emerald Green)	26 C 11
1895	*Mitraille* (*Fr.* old iron)	46 B 3
186–	*Mittler's Green* ^{P} (Guignet's Green)	29 L 9
1920	Moccasin ^{T} +	7 A 12
1921	Mocha ^{T} +	8 C 11
1928	Mocha Bisque ^{T}	14 C 8
17—	*Mock Gold* ^{P} (*Aurum Mussivum*)	
18—	*Mock Turkey Red* ^{V} (Barwood R)	
18—	*Mode* ^{T} †	
1928	Mode Beige ^{T} +	14 B 5
1921	Mohawk ^{T}	7 H 12
1906	Mole ^{T} (see † Taupe)	
1906	Mole Grey ^{T} (see † Taupe)	
1903	Moleskin ^{T} (see † Taupe)	
1926	Monaco ^{T}	27 K 4
1928	Monet Blue ^{T}	44 C 11
1835	*Monicon* ^{P} (*Damonico*)	10 A 11
1927	**MONKEY SKIN** ^{T}	5 B 9
1916	Monkshood ^{T}	46 I 10
1925	**MONSIGNOR** ^{T}	41 K 8
1892	*Monsoreau* ^{T} +	4 K 2
1927	Monte Carlo ^{T} +	35 L 1
1928	Montella ^{T}	8 J 11
1923	Monterey ^{T}	5 J 12
	Monthier's Blue ^{P} (Prussian Bl)	
1928	Monticello Green ^{T}	23 E 11
	Montpellier Green ^{P} (Verdigris †)	28 B 7
1850	*Montpellier Yellow* ^{P} (Turner's *Y*)	10 K 3
1925	Moonbeam ^{T}	44 A 2
1925	**MOONLIGHT** ^{T}	11 A 2
1898	Moonlight Blue ^{M}	36 I 4
1928	Moonmist ^{T}	12 A 2
1902	Moorish Red ^{M}	10 L 9
1920	Moose ^{T}	8 C 10
1791	Mordoré	6 C 11
	Morea Berries ^{V} (Persian Berries)	10 L 6
1849	Morello — . . . (Murrey)	48 E 9
1654	*Morellus* (See † Mulberry)	
1925	Moresco ^{T}	9 E 10
182–	Morillon ^{B} ++ (*Fr.* uncut emerald)	22 L 2
1916	Morning Blue ^{T}	35 E 1
1705	*Morning Dawning Yellow* ^{T} (Aurora)	1 G 10
1920	Morning Glory ^{T}	42 F 4
17- -	*Mort d'ore* . . . (Mordoré)	6 C 11
1925	Moroccan ^{T} †	5 K 11
1919	Morocco ^{T} †	8 J 6
1905	Morocco Red ^{T} †	6 K 11
1927	Morocco Sand ^{T} +	13 C 6
1927	Moro Red ^{T} +	7 L 10
1921	Morro ^{T} —	8 H 6
1927	Mosaic Blue ^{T}	37 A 10
1764	*Mosaic Gold* ^{P} (Aurum Mussivoum)	
1892	Moscovite —	31 E 3
1925	Mosque ^{T}	4 F 12
1884	**MOSS [GREEN]** + †	21 L 2
1905	**MOSS [GREEN], OLD** ^{O} †	14 L 2
1902	Moss Grey ^{B}	14 F 2
1926	Moss Pink ^{T}	4 B 4
1892	Moss Rose . . . (F = 11 D 2)	3 G 3
1925	Mosul ^{T}	14 F 8
1920	Moth [Grey] +	11 C 3
1912	Motmot Blue ^{R}	35 L 2
1912	Motmot Green ^{R}	27 B 10
16—	*Mountain Blue* ^{P} (Azurite Bl)	36 K 7
16—	Mountain Green ^{P} (Malachite)	28 A 9
1927	Mountain Green ^{T}	24 A 11
1801	*Mountain Yellow* ^{P} (Yellow Ochre)	11 L 7
1606	Mouse [Grey] +	15 C 6
1420	*Mouse-dun* . . . (Mouse)	15 C 6
1892	Mousse + ... (*Fr.* Moss)	21 L 2
1928	Mt. Vernon Green ^{T}	23 J 8
1839	*Mud*	?
1922	Muffin ^{T}	13 J 9
1776	Mulberry — †	48 E 9
1912	Mulberry Purple ^{R}	45 K 10
1928	**MULBERRY FRUIT** ^{T} (see † Mulberry)	56 H 12
1598	*Mummy* ^{P} (Asphaltum)	8 H 11
1886	Mummy Brown ^{R} +	15 C 8
1920	**MUMMY** ^{T}	14 J 9
1923	Mummy Brown ^{T} +	7 E 11
	Munich Lake ^{P} (Carmine)	3 K 5
1895	*Muraille* ^{T} . . . (*Fr.* wall)	14 B 9
1899	Murillo ^{T}	36 K 8
1654	Murinus + . . . (Mouse)	15 C 6
1403	Murrey — (Mulberry †)	48 E 9
1926	**MUSCADE** ^{T} +	4 A 10
1902	Muscovite . . . (Moscovite)	31 E 3
1892	Mushroom (F + = 14 K 7)	15 A 6
1654	Musk	8 H 12
1920	Musketeer ^{T}	40 H 12
1927	Muskmelon ^{T}	11 A 8
1924	Muskrat ^{T} +	8 J 10
1466	*Must, Muster* ^{T} (a grey)	?
1400	*Musterdevillers* ^{T}	
1924	Mustang ^{T} +	15 E 8
1886	Mustard [Yellow] †	11 J 4
1926	Mustard Brown ^{T} +	14 D 10
185–	*Mutrie Yellow* ^{P} (Cadmium Lemon)	9 L 1
1905	Myosotis Blue (Forget-Me-Not)	36 G 4
1912	Mytho Green ^{R}	20 B 5
1835	**MYRTLE [GREEN]** (T = 31 H 12) R =	31 L 1
1727	*Nacarat* ^{T}	2 L 10
16—	*Nacarat de Bourre* ^{T} †	
1643	*Nacarine* ^{T}	2 L 10
1920	Naiad ^{T}	27 B 7
1775	Nankeen ^{T} [Yellow] (F = 14 A 2)	10 F 3
	Nankin (*Fr.* Nankeen)	
	Naples Red ^{P} . (Bole)	5 F 11
1738	Naples Yellow ^{P}	10 F 3
1728	*Giallolini, -no* ^{P}	
1891	*Neopolitan Yellow* ^{P}	
1850	Napoleon Blue ^{T}	44 C 11
1927	Napoli ^{T}	37 K 7
1924	Narcissus ^{T}	10 K 4
	Narrawood ^{V} (Redwood)	
1922	Narva ^{T} —	31 L 5
1896	Nasturtium [Red] ^{T}	4 I 12
1845	Nasturtium [Yellow] ^{T}	9 L 8
1912	Natal Brown ^{R}	7 A 10
1895	**NATIONAL [BLUE]** ^{T}	44 B 11
1925	National Grey ^{T}	46 A 1
1925	Nattier ^{T}	35 K 6
1928	Natural ^{T}	11 A 2
1921	Navaho	10 C 12
1840	**NAVY BLUE** †	40 E 11
1915	**NAVY 1** ^{T} + †	47 C 11
1915	**NAVY 2** ^{T} †	40 A 12
1915	**NAVY 3** ^{T} †	40 A 10
190–	Navy Green +	22 L 12
1927	Neapolitan Blue ^{T} +	46 F 12
1891	*Neapolitan Yellow* ^{P} (Naples Y)	10 F 3
1916	Nectar ^{T}	5 E 3

1899	*Nectarine*....(Peach)....	9	A	5
1698	Negro.......(*Sp.* Black)			
1915	**NEGRO** ^{T}	8	E	9
1920	Neptune [Green]	27	J	8
	Neutral Gray †			
183-	Neutral Orange	3	B	12
1912	Neutral Red ^{R}	6	F	5
180-	**NEUTRAL TINT** ^{P}	48	C	8
1912	Neuvider Green ^{R} (Neuwieder)	17	B	8
18—	*Neuwied Blue* ^{P} (Bremen Blue)	36	K	1
18—	*Neuwieder Green* ^{P}	17	B	8
1912	Neva Green ^{R}	17	L	8
18—	**NEW BLUE** ^{P} (Art. Ultra.)	41	F	12
1925	**NEW BRONZE** ^{T} +	15	E	11
1928	**NEW COCOA** ^{T}	7	A	10
1892	*New Hay* ^{F} +	24	J	3
1927	**NEW SILVER** ^{T}	11	B	1
1922	Newport ^{T}	37	L	7
1921	Niagara ^{T}	25	K	1
1912	Niagara Green ^{R}	27	H	4
1703	Nicaragua-wood ^{V} (Redwood)			
1895	*Nice* ^{T}	36	I	7
1915	**NICKLE** ^{T}	36	A	2
1912	Nickle Green ^{R}	31	E	7
	Night Green †			
1916	Nightshade ^{T}	47	H	11
1924	Nikko ^{T}	36	J	7
1884	Nile Blue (F+=36 J 3)	26	J	2
1888	**NILE** [**GREEN**] (F=28 G 2)	19	B	5
1928	Nimbus ^{T} +	36	A	2
1921	Nippon	40	L	10
1892	Noisette ^{T} (*Fr.* Hazel-nut)	13	J	8
1926	Nomad Brown ^{T} —	8	L	10
1899	*Norfolk*	8	H	10
1902	Norman Crimson ^{B} (Imit. Ver.)			
1902	Norman Red ^{B} (Imit. Ver.)			
1892	*Normandy Blue* ^{F}	36	G	1
1923	Normandy ^{T}	40	J	11
1925	Nougat ^{T}	13	A	5
1920	Nubian ^{T} ++	8	C	9
1925	**NUDE** ^{T}	11	A	4
1921	Nugget ^{T}	11	L	8
1922	Nuncio ^{T}	41	H	7
	Nuremberg Red ^{P} (Bole)	5	F	11
1868	*Nuremberg Violet* ^{P} (Manganese V)	42	J	8
1300	Nut Brown †			
1789	*Nut Grey* ^{T} †			
1610	Nutmeg +	15	A	9
1892	Nutria ^{T}	15	A	3
1892	*Nyanza* ^{T}	19	C	4
1891	Nymph [Pink] ^{T}	42	F	1
1923	Nymphea ^{T} † (*Fr.* water-lily)			
15—	*Oad* ^{V}.......(*Woad*)	47	A	10
1888	*Oak* ^{T}[Green]	22	L	1
	OAK [Brown]	14	A	11
1926	Oakbuff ^{T}	13	D	7
1927	Oakheart ^{T} +	6	H	10
1887	Oakleaf Brown ^{M}	5	A	12
1925	**OAKWOOD** ^{T}	14	B	9
1921	Oasis ^{T}	20	L	2
1915	**OCEAN GREEN** ^{T}	18	B	5
1776	Ochraceous (ochre yellow)	11	L	7
1750	Ochreus			
1912	Ocher Red ^{R}	5	I	9
1398	**OCHRE** † (Yellow Ochre)	11	L	7
	Ochre, Blue ^{P}	38	J	4
1764	Ochre, Brown ^{P} (Roman Ochre)	11	K	9
1598	Ochre, Burnt ^{P}	3	G	12
	Light Red ^{P}			
1835	Ochre de Ru ^{P} (Rut Ochre)	12	L	9
1649	Ochre, English ^{P} (Yellow Ochre)	11	L	7
	Ochre, Flesh ^{P}	5	E	12
	Ochre, French ^{P} (Yellow Ochre)	11	L	7
	Ochre, Gold ^{P} (Roman Ochre)	11	K	9
	Ochre, Gold, transparent ^{P}	12	L	9
	Ochre, Green ^{P} (Terre Verte)			
	Ochre, Italian ^{P} (Raw Sienna)	13	L	10
	Ochre, Italian, Burnt ^{P} (Burnt Sienna)	5	F	12
	Ochre, Lead ^{P} (Massicot)			
1839	*Ochre, Orange* ^{P} (Bt. Roman Ochre)	10	L	11
1854	Ochre, Oxford ^{P} (Yellow Ochre)	11	L	7
1835	Ochre, Purple ^{P} (Mars Violet)	7	L	6
1289	*Ochre, Red* ^{P} (Bole)	5	G	12
1835	Ochre, Roman ^{P}	11	K	9
1764	Brown Ochre			
	Gold Ochre, Golden Ochre			
	Roman Earth			
	Ochre, Roman, Burnt ^{P}	10	L	11
1839	*Orange Ochre*			
1839	*Spanish Ochre*			
	Ochre, Rut ^{P}	12	L	9
1588	*Oker de Luce, de Luke*			
1654	*Oker de Rous*			
	Ru Ochre			
1839	Spruce Ochre			
16—	Ochre, Ru ^{P} (Rut Ochre)	12	L	9
18—	Ochre, Satin ^{P} (pale Umber)			
1764	*Ochre, Scarlet* ^{P} (Indian R)	6	L	12
1839	*Ochre, Spanish* ^{P} (Bt. Roman Ochre)	10	L	11
1835	Ochre, Spruce ^{P} (Rut Ochre)	12	L	9
1839	*Ochre, Stone* ^{P} (variable color)			
1481	**OCHRE, YELLOW** ^{P}	11	L	7
	Chinese Yellow			
1835	*Di Palito*			
1640	English Ochre			
	French Ochre			
	Gold Earth			
1881	*Imperial Yellow*			
17—	*Mineral Yellow*			
1801	*Mountain Yellow*			
	Oxford Yellow			
1875	*Oxford Chrome*			
	Oxide Yellow			
	Permanent Yellow			
1601	*Sil*			
1688	*Yellow Earth* (impure Ochre)			
	Yellow Sienna			
	Yellow Wash (impure Ochre)			
1789	*Oeilet Green* ^{T}		?	
18—	*Oil Blue* ^{P} (Horace Vernet Bl)	42	E	12
17—	*Oil Green* ^{P} (Malachite Gr)	28	A	19
1843	Oil Yellow	12	L	1
1588	*Oker de Luce, Luke* ^{P} (Rut Ochre)	12	L	9
1600	*Oker de Rouse* ^{P} (Rut Ochre)	12	L	9
1927	Old Amethyst ^{T} +	7	C	5
1928	Old Blue †	36	F	3
1925	Old Bronze ^{T} +	14	L	7
1926	Old Burgundy ^{T}	56	H	9
1923	Old Cedar ^{T} —	7	J	9
1916	**OLD CHINA** ^{T}	37	C	7
1923	Old Coral ^{T}	3	J	10
1887	Old English Brown ^{M} +	8	E	10
18—	**OLD GOLD** (See † Gold)	14	K	5
1926	Old Helio ^{T}	45	J	9
1898	**OLD IVORY**	12	C	3
1924	Old Lavender ^{T}	56	A	7
1926	Old Lilac ^{T}	45	H	6
1925	Old Mauve ^{T}	46	I	5
1905	Old Moss Green ^{O} (see † Moss)	14	L	2
1905	Old Olive ^{O} (Olive Brown, †)	15	H	7
1913	Old Pink ^{M}	4	B	10
1921	Old Red ^{T}	5	K	6
1892	**OLD ROSE** †	4	I	2
1892	Old Rose Leaf ^{T} (F=45 I 2)	7	J	3
1905	Old Silver ^{O} †	38	A	1
1926	Old Wine ^{T} (see † Wine)			
1892	*Old Wood* ^{F} +	5	J	4
1496	*Olde* ^{V}.......(Weld)	11	K	1
1776	Olivaceous (Olive Green)	15	L	4
1613	**OLIVE** [**GREEN**] †	15	L	4
1796	Olive Brown † (old olive)	15	H	7
1892	**OLIVE DRAB**	15	J	5
1862	Olive Grey +	21	A	2
	Olive Terre Verte ^{P}	22	L	1
1926	**OLIVE WOOD** ^{T}	15	E	10
1886	Olive Yellow	12	L	2
1928	Olivesheen ^{T}	13	K	3
1912	Olivine ^{R}	18	C	6
1918	Olympia ^{T}	35	L	1
1928	Olympian Blue ^{T}	45	B	12
18—	*Olympian Green* ^{P} (Malachite Gr)	28	A	9
1921	Olympic ^{T}	39	L	5
18—	Olympic Blue (Cobalt Bl)	34	L	7
1892	*Ondine* ^{T} +	28	B	3
1766	*Onion-peel* ^{T}	5	K	2
1705	*Onion Red* ^{T}	5	K	2
1912	Onion-Skin Pink ^{R} +	11	A	7
1912	Ontario Violet ^{R}	43	B	7
1496	*Oold* ^{V}.......(Weld)	11	K	1
1921	Opal ^{T} +	28	K	5
1862	Opal Blue †	36	E	6
1875	Opal Grey +	54	B	1
1927	Opal Mauve ^{T}	51	A	2
1912	Opaline Green ^{R}	17	A	6
1927	Opera Mauve ^{T}	42	H	5
1902	Opera Pink	1	B	8
1892	Ophelia ^{T}....(F=52 F 8)	53	A	7
1927	Oporto ^{T} +	55	L	12
1512	**ORANGE** †			
1766	*Orange Aurora* ^{T}	1	G	10
183-	Orange, Chinese (Japanese Y)	9	D	12
1886	Orange Rufous ^{R}	11	L	12
17—	Orange Lead ^{P}	1	F	12
17—	Mineral Orange			
16—	*Paris Red*			
16—	*Sandix, Sandyx*			
1835	Saturn, *Saturnine*, Red			
183-	Orange, Neutral	3	B	12
1839	Orange-peel (see † Orange)	10	L	10
1588	*Orange Tawny*	3	E	12
	Orange Vermilion ^{P}	2	G	12
1567	Orcanette ^{V} (*Fr.* Alkanet)			
1928	Orchadee ^{T}	42	H	4
1606	*Orchall* ^{V}.....(Orchil)			
1567	Orchanet ^{V} (*Fr.* Alkanet)			
1915	**ORCHID**	41	F	5
1925	**ORCHID PINK** ^{T}	42	G	1
1483	Orchil ^{V}.....(acid bath)	4	K	9
	(alkali bath)	53	K	5
	Archil, *Archel*			
	Crotal, Crottle, Crostil			
	Cork, Corker, Corkur			
	Corcir			
	Cudbear (a similar lichen)			
	French Purple			
	Kork, Korkir			

1606	*Orchall*	
	Orseille	
	Persio, Persis	
1928	Orchis ^{T}	52 E 1
1921	Orient [Blue] ^{T}	36 D 11
18—	Orient, Bleu d' (Victoria Bl)	36 I 11
1912	Orient Blue ^{R}	36 G 7
1892	*Orient* [*Yellow*] ^{F}	13 L 6
1754	*Orient* (Aurora)	2 E 7
1912	Orient Pink ^{R}	9 A 6
1905	Orient Red	3 L 10
186-	*Orient Yellow* ^{P} (Cadmium Y)	9 L 8
1892	*Oriental* ^{F}	36 F 5
17—	*Oriental Blue* ^{C} (Delft Bl)	38 A 8
18—	*Oriental Blue* ^{P} (Art. Ultra.)	41 F 12
	Oriental Bole ^{P} (Bole)	5 F 11
1925	Oriental Fuchsia ^{T}	53 E 12
1902	Oriental Green	19 F 10
1924	Oriental Pearl ^{T} —	14 A 2
1902	Oriental Red ^{M}	3 L 10
1923	Oriole ^{T}	12 L 11
1920	Orion ^{T}	39 E 11
	Orlean ^{V} (Annatto)	10 A 7
1920	Ormond ^{T} +	14 A 4
1548	*Orpin* ^{P} (*Fr.* Orpiment)	10 K 3
1386	*Orpiment* ^{P}	10 K 3
1398	*Auripigmentum*	
1835	*Chinese Yellow*	
1761	King's Yellow	
1548	*Orpin*	
	Royal Yellow	
	Yellow Realgar	
1814	*Orpiment Orange*	10 B 12
14—	*Orpiment Red* ^{P} (Realgar)	10 L 8
	Orseille ^{V} (*Fr.* Orchil)	
1880	Otter ^{T} [Brown] — †	8 E 11
1902	Ottoman Red ^{P} (Imit. Ver.)	
1912	Oural Green ^{R} (*Fr.* Ural)	18 A 5
1920	Owl ^{T}	16 A 9
1705	Oxblood [Red]	7 L 9
1836	Oxford Blue + (see † Eton)	40 A 12
	Oxford Ochre ^{P} (Yellow Ochre)	11 L 7
183-	Oxford Grey †	
1875	*Oxford Chrome* ^{P} (Oxford Ochre)	11 L 7
1600	Oxgall ^{P} (Gallstone)	10 L 4
1922	Oxheart ^{T}	6 L 5
1912	Oxide Blue ^{R}	34 L 8
	Oxide Brown ^{B} + (Purple Brown)	7 L 12
	Oxide Purple ^{B} + (Purple Brown)	7 L 12
18—	Oxide Red ^{P} †	
	Oxide Yellow ^{P} (Yellow Ochre)	11 L 7
186–	Oxide of Chromium, Opaque ^{P}	21 B 8
186–	Oxide of Chromium, Trans. ^{P}	28 K 11
186–	Emeraude	
186–	Veronese Green	
186–	Viridian	
1894	Oyster Grey	19 A 2
1893	Oyster [White] +	10 B 1
1924	**PABLO** ^{T}	12 G 7
1918	Pacific ^{T}	36 J 1
1921	Paddock ^{T}	29 L 7
1921	Pagoda ^{T} [Blue]	39 L 8
1892	*Palestine* ^{T}	44 E 2
1905	Palissandre ^{O} + (*Fr.* Rosewood, †)	6 L 10
1921	Palm ^{T}	22 L 2
187-	Palm Green ^{M}	23 L 12
1926	**PALMETTO** ^{T}	22 B 6
1917	Palmleaf ^{T}	14 L 1
1925	Paloma ^{T}	12 A 9
1923	Pampas ^{T}	15 C 4
1924	Pan ^{T}	31 J 3
1654	*Pancy Green* ^{P} (Flower de Luce, †)	22 D 8
1705	**PANSY** ^{T} †	43 K 11
1899	*Pansy-Maroon*	7 A 6
1814	Pansy Purple	54 L 8
1912	Pansy Violet ^{R}	44 K 8
1895	Paon ^{T} (*Fr.* Peacock)	37 L 6
1385	*Paper White*	11 A 1
1921	**PAPRICA** ^{T}	2 J 12
1923	Papyrus ^{T}	12 C 7
1926	Paradise Green ^{T}	22 L 11
1896	Para Red ^{P}	3 L 11
1898	*Devil's Red*	
1898	*Dewey Red*	
1898	*Parma Red*	
1898	*Perma Red*	
1898	*Permanent Red*	
1919	**PARCHMENT** ^{T} —	12 B 3
18—	Paris Blue ^{P} (Prussian Bl)	
1864	*Paris Green* ^{P} (impure Emerald Gr.)	18 B 9
16—	*Paris Mud* ^{T} —	48 H 5
1600	*Paris Red* ^{P} (Mineral Orange ^{P})	1 F 12
18—	*Paris Yellow* ^{P} (Chrome Y)	10 L 4
189–	Park Green ^{B} +	21 L 7
1896	*Parma Red* ^{P} (Para Red)	3 L 11
18—	Parma Violet †	
18—	Parme, Violet Parme	
1920	Parrakeet ^{T} †	21 L 6
1705	*Parroquit Green* ^{T} (Parrot Gr)	21 L 6
1646	Parrot Green †	21 L 6
1917	Partridge ^{T}	15 L 12
1912	Parula Blue ^{R}	36 C 6
1789	Pastel Blue † (Woad)	47 A 10
1887	Pastel Grey ^{M}	11 D 3
1927	Pastel Parchment ^{T}	11 A 5
1899	*Pastel Pink*	?
1928	Paté Shell ^{T}	11 B 5
1781	*Patent Yellow* ^{P} (Turner's Y)	10 K 3
189–	Patina Green ^{M}	19 B 7
1925	**PATRIARCH** ^{T}	43 L 9
1924	Patricia ^{T}	42 K 7
1600	*Pauncy Green* ^{P} (Flower de Luce †)	22 D 8
1688	Pavonine (Peacock Blue)	37 L 6
18—	*Paul Veronese Green* ^{P} (Emerald Gr)	26 C 11
1928	Pawnee ^{T} +	13 B 6
1835	**PAYNE'S GREY** ^{P}	47 A 9
1752	**PEA GREEN** †	20 G 6
1588	**PEACH** †	9 A 5
1928	Peachbeige ^{T}	11 A 6
1926	Peach Bisque ^{T}	5 D 10
1886	**PEACHBLOOM** ^{T}	2 B 9
1702	Peach Blossom [Pink, Red.] †	1 C 2
1861	Peach Blow +	10 B 5
1926	Peach Blush ^{T}	5 C 11
1905	Peach Red	2 F 10
1822	*Peachwood* ^{T} (Redwood)	
1598	**PEACOCK [BLUE]** †	37 L 6
1882	Peacock Green (F+ = 28 J 5)	20 C 9
1919	Peanut ^{T} +	12 B 2
1604	**PEARL** †	44 A 2
1669	Pearl Blue (R = 43 A 5)	44 A 2
1927	**PEARLBLUSH** ^{T}	12 A 5
1705	**PEARL GRAY** †	44 A 1
1590	*Pearl White* †	44 A 2
1922	Peasant ^{T}	40 H 11
1926	Peasant Blue ^{T} —	39 H 11
1920	Pebble ^{T} —	12 B 2
1920	Pecan ^{T} +	13 B 5
1912	Pecan Brown ^{R}	14 A 9
1925	**PELICAN** ^{T}	47 A 2
1858	*Peligot's Blue* ^{P} (Bremen Bl)	36 K 1
1919	Pelt ^{T} +	15 C 4
1926	Pekinese ^{T}	13 G 10
1926	**PEKING BLUE** ^{T}	38 J 10
1928	Pencilwood ^{T}	5 C 11
1928	Penguin ^{T} +	38 A 2
1789	Pensée ^{T} (*Fr.* Pansy)	41 K 12
1918	Peony ^{T}	7 H 6
1926	Peony Red ^{T} +	6 J 6
1892	*Pepita* ^{T}	13 D 5
1766	Pepper Red ^{T} —	4 K 10
1925	Peppermint ^{T}	17 J 10
1923	Peridot ^{T}	22 L 6
1920	Perilla ^{T}	42 K 12
1912	Perilla Purple ^{R}	47 J 3
1923	Perique ^{T} +	8 E 11
1922	**PERIWINKLE** ^{T}	43 B 8
1856	*Perkin's Purple* (Mauve)	
1856	*Perkin's Violet* (Mauve)	
1896	*Perma Red* ^{P} (Para Red)	3 L 11
18—	Permanent Blue ^{P} (Art. Ultra)	41 F 12
	Permanent Green ^{P} (Terre Verte)	
1896	*Permanent Red* ^{P} (Para Red)	3 L 11
187-	*Permanent Violet* ^{P} (Manganese V)	42 J 8
	Permanent Yellow ^{P} (Y. Ochre)	11 L 7
1892	*Perruche* ^{F} (*Fr.* parrakeet †)	21 L 6
1366	*Pers, Perse* † (Blue)	
1892	*Persenche* ^{F}	43 E 7
	Persian Berries ^{V}	10 L 6
18—	*Andrinople Berries*	
1727	*Avignon Berries*	
	Buckthorn Berries	
1727	*French Berries*	
	Morea Berries	
1841	*Turkey Berries*	
1654	*Venice Berries*	
1712	*Yellow Berries*	
1669	*Persian Blue* ^{T} (see † Pers)	47 C 10
1912	Persian Blue ^{R} (TCCA F 24 = 36 L 4)	33 C 4
1735	*Persian Earth* ^{P} (Indian Red)	6 L 12
1892	Persian Green (F = 26 C 11)	31 H 7
1905	Persian Lilac ^{R}	51 H 1
1927	Persian Melon ^{T}	3 B 10
1892	Persian Orange ^{F}	10 F 10
1923	Persian Pink ^{T}	3 H 4
1897	Persian Red ^{P} (Imit. Ver.)	
1835	*Persian Red* ^{P} (Indian Red)	
1922	Persian Rose ^{T}	50 K 7
1905	*Persian Yellow* (Chinese O)	9 L 12
1919	Persimmon ^{T}	6 E 12
	Persio, Persis ^{V} (Orchil)	
1924	Peruvian Brown ^{T}	13 L 11
	Peruvian Yellow ^{P}	3 F 12
1892	Pervenche ^{T} (*Fr.* Periwinkle) †	45 B 9
1916	Petunia ^{T}	46 K 11
1891	Petunia [Violet]	43 K 8
13—	*Pewke* ^{T} † (Puce)	7 H 4
1924	Pewter	48 A 3
1923	Phantom ^{T}	16 A 3
1926	Phantom Red ^{T}	2 L 12
1923	Pharoah ^{T}	45 C 12
1865	*Philomel Yellow* ^{T} †	
1916	Pheasant ^{T}	4 B 11
1655	*Philamot* (Feuille Morte)	5 A 12
1918	Phlox ^{T}	54 H 12
1912	Phlox Pink ^{R}	41 E 4
1886	Phlox Purple ^{R}	51 A 11
1924	Piccadilly ^{T}	7 H 10
1924	Piccaninny ^{T}	8 E 11
	Piccolpasso Red	7 L 9

1919	**PIGEON**^{T}	55 A 3
1927	Pigeon Blood^{T} —	7 J 6
1846	*Pigeon's-breast*^{T}	5 D 4
1839	*Pigeon's Neck*^{T}	47 A 4
1839	*Pigeon's Throat*^{T}	30 J 7
1922	Pigskin^{T} +	14 E 8
1921	Pilgrim^{T} —	48 A 1
1820	Pilgrim Brown —	8 L 12
1928	Pilot Blue^{T}	35 I 9
1921	**PIMENTO**^{T}	2 L 11
1922	Pimlico^{T}	45 H 10
1912	Pinard Yellow^{R}	9 J 2
1805	*Pinchbeck Brown*	12 L 7
1928	Pineapple^{T} +	11 J 2
1928	Pinecone^{T} +	15 C 9
1928	Pine Frost^{T}	28 B 4
1925	Pinegrove^{T}	31 H 9
1927	Pineneedle^{T}	31 H 9
1923	Pine Tree^{T}	31 L 6
1598	*Pink, Pinke*^{P} † (a yellow pigment)	
	(See Stil de Grain Yellow)	
15—	**PINK** †	
1915	**PINK 1**^{T} †	1 B 7
1915	**PINK 2**^{T}	1 C 7
1915	**PINK 3**^{T}	1 D 7
1920	**PINK 4**^{T}	1 E 7
1920	**PINK 5**^{T}	1 G 7
1926	Pink Coral^{T}	1 H 9
1926	Pink Pearl^{T}	1 F 8
1925	**PIPING ROCK**^{T}	13 A 2
1928	Piquant Green^{T}	20 K 6
1927	Pirate^{T}	2 K 11
1892	**PISTACHE** † (*Fr.* Pistachio Gr). .	19 C 6
1789	**PISTACHIO GREEN** † . .	19 C 6
1871	*Pit Black*	
1599	Pitch Black †	
1905	Pitchpine	31 E 6
17—	Piuree, Piuri^{P} (Indian Y)	10 K 7
17—	Purree	
1924	Pi Yu^{T}	29 K 10
1926	Plantation^{T} +	6 D 11
1850	*Platina Yellow*^{P}	13 L 12
1918	Platinum	45 A 3
1926	Plaza Grey^{T} +	44 A 1
1912	Pleroma Violet^{R}	43 I 8
1892	*Plomb*. . . . . . .(*Fr.* Lead †)	
1920	Plover^{T} +	15 B 5
1805	**PLUM** [Purple]	47 J 9
1897	*Plum Bloom*^{T}	?
1814	Plum Purple	47 J 12
1905	Plum Violet	7 E 6
1905	Plumbago Blue^{R}	43 B 4
1912	Plumbago Grey^{R}	44 B 4
1912	Plumbago Slate^{R} +	46 D 6
1789	*Plumb Juice*^{T}	?
1658	Plumbeous (*Ln.* Lead †). .	55 A 2
1533	*Plumbet*^{T}. . . .(Blonket). . .	34 B 2
1440	*Plunket*^{T}. . . .(Blonket). . .	34 B 2
1921	Plymouth^{T} +	48 A 1
1789	*Poil d'ours*^{T} (*Fr.* Bear Skin). . . .	16 A 5
1919	Poilu^{T}	37 C 5
1922	Poinsettia^{T}	2 L 9
1905	Pois Green (*Fr.* Pea Green)	22 G 5
1917	**POLAR BEAR**^{T}	9 B 2
1926	Polignac^{T}	4 D 9
1928	Polo Green^{T}	23 J 9
1925	Polo Tan^{T}	13 C 6
1872	Pomegranate †	1 E 6
1705	*Pomegranate Blossom*^{T} † . .	1 J 12
1886	Pomegranate Purple^{R} † . .	4 I 6
1833	*Pomona Green* (Apple Green)	19 J 6
1889	**POMPADOUR [GREEN]**^{T}	35 J 8
1920	Pompeii^{T}	7 L 2
1898	Pompeian Blue^{M}	36 E 4
1882	Pompeian Red †	4 J 10
1902	Pompeian Yellow^{M}	11 F 7
1926	Ponce de Leon^{T}	11 L 11
1835	Ponceau † (*Fr.* corn-poppy)	1 J 12
1925	Pond Lily^{T}	10 I 4
1892	*Pongee*^{T}	11 B 4
1900	Pontiff [Purple]^{T}	41 K 10
1928	Pony Brown^{T} —	15 A 7
1927	**POPCORN**^{T}	9 J 3
1530	*Popinjay Green* (Parrot Gr). . .	21 L 6
1916	Poplar^{T}	31 C 8
1705	Poppy [Red] (see † Ponceau)	1 J 12
1806	*Portable Red*^{T}	4 L 12
1921	Porcelain^{T}	34 J 7
1789	Porcelain Blue (F = 38 A 7)	36 J 3
1912	Porcelain Green^{R}	29 J 5
1616	*Porraceous* (*Ln* Leek Green). . . .	22 J 5
1601	*Porret*. . . . . . .(young leek)	22 J 5
1918	Port^{T}	56 E 12
182–	Portland Stone^{B} †	
	Portugese Red^{P} (Carthamus R)	1 L 11
1927	Port Wine^{T}	56 J 12
19—	Post Office Red^{B} —	3 L 12
1927	Posy Green^{T}	29 E 6
	Poudre Blue (*Fr.* Powder Blue).	36 H 2
1707	*Powder Blue*^{P} † (Smalt^{P})	43 D 11
1894	Powder Blue †	36 H 2
1926	Powder Pink^{T}	3 E 7
1926	Powdered Gold^{T}	12 I 6
1892	Prairie^{T} + (F = 23 L 3+).	13 F 6
1902	Prairie Brown^{M}	13 D 12
1892	Praline^{T} — (F = 45 H 2).	15 A 9
1528	*Prasine, Prasseyn* †	
1826	*Prasinous*	
1839	Prawn [Pink] (Shrimp †). .	1 E 10
1895	Prelate^{T}	44 J 11
1629	**PRIMROSE YELLOW** †.	10 J 4
1892	Primrose Green +	10 F 1
1905	Primuline Yellow^{R}	10 L 5
1925	Prince Grey^{T}	54 A 2
1705	*Prince's Color*^{T} (a dark Purple).	?
1762	*Princess Yellow*^{P}	?
1928	**PRINCETON ORANGE**^{T}	9 K 11
1925	Priscilla^{T}	35 A 2
184–	Privet	24 C 2
1912	Prout's Brown^{R}	15 H 11
1789	**PRUNE**^{T} +	47 J 8
1789	Prune Purple^{R}	46 L 11
1922	Prunella^{T}	45 K 11
17—	Prussian Blue^{T} † (dye)	
17—	**PRUSSIAN BLUE**^{P} † (pigment)	
18—	Bronze Blue	
18—	Chinese Blue	
18—	Milori Blue	
1817	Steel Blue	
1724	Berlin Blue	
18—	*American Blue*	
	Brunswick Blue	
18—	*Erlangen Blue*	
18—	*Hamburg Blue*	
1905	*Hortense Blue*	
17—	*Louisa Blue*	
18—	Paris Blue	
	Turnbull's Blue	
17—	Prussian Brown^{P}	13 L 12
1842	*Prussian Green* †	
1835	*Prussian Red*^{P} (Indian R)	6 L 12
1804	*Prussian Red*^{P} (Colcothar)	7 L 12
1924	Psyche^{T}	18 B 8
13—	Puce. . . . .(*Fr.* Flee). . .	7 H 4
1923	Pueblo^{T} +	15 C 11
13—	*Puke*^{T}. . . . . .(Puce).	7 H 4
1892	*Pullman Car*^{F} +	15 H 5
1922	Pumpkin^{T}	10 H 11
1923	Punjab^{T}	12 L 12
1912	Puritan Grey	36 B 2
975	**PURPLE** †	
1928	Purple Aster^{T}	43 J 7
18—	Purple Brown^{M} +	7 L 12
1926	Purple Heather^{T}	42 I 8
	Purple Lake^{P} (Burnt Carmine).	5 K 6
1839	Purple Madder^{P}	5 K 4
1926	**PURPLE NAVY**^{T}	46 F 12
	Purple Oxide^{B} + (Purple Brown)	7 L 12
	Purple Rubiate^{P} (Purple Madder). .	5 K 4
1382	Purpur. . . . . .(Purple)	
1000	*Purpurine*	
17—	Purree, Piuri^{P} (Indian Y)	10 K 7
17—	Purrea Arabica^{P}	
1889	**PUTTY** †	11 B 2
1892	*Pygmalion*^{T} —	13 K 8
1905	Pyrethrum Y (Golden Feather Y).	11 L 2
1912	Pyrite Yellow^{R} (Pyrite Green^{O})	12 L 3
1920	Quail^{T} +	15 A 4
1818	*Quaker Color*^{T} †	
1916	Quaker^{T}	45 B 3
1892	Quaker Blue —	40 E 5
1892	Quaker Drab (F = 19 B 1).	46 B 2
1892	Quaker Green	23 L 4
	Quaker Grey^{M}	21 B 1
1926	**QUEEN BLUE**^{T}	36 B 8
1902	*Queen Anne Green*^{B}	21 C 2
1669	*Queen's Blue*^{T}	36 B 8
1839	*Queen's Yellow*^{P} (*Turbith Mineral*). .	10 J 2
18—	Quercitron^{V} (dye)	10 K 3
	Citron Bark^{V}	
1775	Quercitron Lake^{P}	11 L 7
1926	**QUIMPER**^{T}	36 I 7
1398	Quince Yellow	11 L 3
1922	Rabbit^{T} —	15 C 5
1924	Racquet^{T}	15 C 7
1523	Raddle^{P}. . . . .(Bole)	5 F 11
1924	Radiance^{T}	1 J 10
	Radiant Yellow^{P} (l. Cadmium Y). . . .	9 L 8
1920	Radio^{T}	38 J 9
1926	Radio Blue^{T}	40 J 7
1921	Raffia^{T}	11 E 5
1922	Ragged Sailor^{T} †	42 C 10
1918	Rail^{T}	39 A 4
1912	Rainette Green^{R} — (*Fr.* tree-frog)	21 K 4
1892	Raisin^{T}	55 J 8
1912	Raisin Purple^{R}	54 B 12
1905	Raisin Black^{R}	56 A 9
1924	Rambler Rose^{T}	3 D 4
1892	*Rameau*^{T} + . (*Fr.* bough). .	32 L 6
1923	Rameses^{T}	44 D 12
1912	Ramier Blue^{R}	45 E 7
1922	Rangoon^{T} —	15 C 12
1925	Raphael^{T}	37 K 10
1921	Rapids^{T}	36 L 2
1892	**RASPBERRY**^{T} (F = 4 J 3)	6 I 5
1905	Raspberry Red^{O} +	3 K 9
1926	Raspberry Glacé^{T}	4 F 4
1633	Rat^{T}	16 C 5
1921	Rattan^{T}	11 K 6
1600	Raven Black (a black of violet tone)	
1805	Raven Grey	
17—	**RAW SIENNA**^{P}	13 L 10
	Italian Ochre	
1658	**RAW UMBER**^{P} (see Umber). . .	15 L 12
1400	Realgar^{P}	10 L 8
1805	*Risigal*	
1805	*Rosalgar*	
1696	*Ruby of Arsenic*	

1398	*Sandaracha*	
1552	*Yellow Carmine*	
	Realgar, Yellow ^{P} (Orpiment)	**10 K 3**
1925	Recamier ^{T}	**1 G 8**
700	**RED**	
1927	Red Banana ^{T}	**5 L 9**
1748	Red Bole ^{P}...(Bole)	**5 F 11**
1538	Red Chalk ^{P}.(Bole)	**5 F 11**
1918	Red Cross ^{T}	**4 L 6**
1759	Redding ^{P}...(Bole)	**5 F 11**
1759	Reddle ^{P}.....(Bole)	**5 F 11**
1899	*Red Currant*	**3 L 10**
1648	Red Earth ^{T}.(Bole)	**5 F 11**
1920	Redfeather ^{T}	**4 L 11**
1289	Red Lead ^{P}	**1 I 12**
1650	Minium	
1398	*Sandarach*	
16—	*Sandyx*	
1289	*Red Ochre* ^{P}..(Bole)	**5 F 11**
18—	Red Oxide ^{P} +	**6 G 12**
1928	Red Robbin ^{T} −	**7 L 6**
11—	Redwood ^{V} [insoluble]	**3 K 9**
	Barwood	
	Caliaturwood	
1698	*Camwood*	
	Narrawood	
	Sandalwood	
	Santalwood	
	Sanderswood	
11 -	Redwood ^{V} [soluble]	**5 K 9**
1190	Brazilwood	
	Fernambucowood	
	Limawood	
	Peachwood (4 K 10)	
	Pernambucowood	
	Sappanwood (*Japanwood*)	
1703	*Nicaraguawood*	
1917	Redwood ^{T}	**6 K 11**
1892	Reed Green	**19 D 2**
1530	Reed Yellow	**10 I 1**
1926	Regal ^{T}	**44 F 12**
1902	Regal Purple + (Royal Pr)	**43 K 11**
1921	Regatta ^{T}	**43 C 12**
1915	**REGIMENTAL** ^{T}	**47 C 10**
1912	Rejane Green ^{R}	**28 A 7**
1892	Rembrandt, ^{T} (F = 31 L 6)	**8 H 9**
18 –	Rembrandt's Madder ^{P}	**4 J 11**
1924	Renaissance ^{T}	**52 L 9**
1875	**RESEDA [GREEN]** (*Fr.* Mignonette) †	**22 K 1**
1921	Resolute ^{T}	**35 G 9**
1928	Reveree ^{T} +	**2 B 8**
1916	Rhododendron ^{T}	**54 J 6**
1912	Rhodonite Pink ^{R}	**43 G 1**
1892	*Rhone* ^{T} +	**18 B 3**
1802	Rhubarb ^{T}	**14 L 6**
1858	**RIFLE [GREEN]** −	**32 A 2**
1924	Riga ^{T}	**37 K 1**
1928	Rigi Blue ^{T}	**39 J 2**
179-	Rinnemann's Green ^{P} (Cobalt Gr)	**20 D 9**
1927	Ripple Green ^{T}	**29 K 2**
1805	*Risigal* ^{P}.....(Realgar)	**10 L 8**
1912	Rivage Green ^{R} (*Fr.* shore)	**17 I 7**
1925	Riviera ^{T}	**35 K 10**
1530	Roan	**7 J 7**
1926	Robinhood Green ^{T}	**31 L 10**
1873	Robin's Egg Blue †	**27 H 3**
1666	*Rocou* ^{V} (*Fr.* Annatto)	**10 A 7**
1918	Rodent ^{T}	**16 C 3**
1916	Roe ^{T}	**12 H 6**
1927	Roma Blue ^{T} +	**46 G 11**
	Roman Earth ^{P} (Roman Ochre).	**11 K 9**
1905	Roman Green ^{R}	**15 L 5**
	Roman Lake ^{P} (Carmine)	**3 K 5**
1835	Roman Ochre ^{P}	**11 K 9**
	Roman Ochre, Burnt ^{T}	**10 L 11**
1924	Roman Purple	**44 K 10**
18—	Roman Sepia ^{P}	**7 A 11**
	Roman Umber ^{P} (Raw Umber)	**15 L 12**
1926	Roman Violet ^{T}	**44 K 8**
1926	Romanesque ^{T}	**46 L 10**
1928	Romantic Green ^{T}	**14 L 3**
1928	Romany ^{T} −	**40 E 12**
1892	*Romarin* ^{T} + (*Fr.* Rosemary)	**24 A 10**
1927	Rosario ^{T} +	**6 A 10**
1777	*Root* ^{T}	?
1805	*Rosalgar* ^{P}...(Realgar)	**10 L 8**
1382	**ROSE [PINK, RED]**, †	
1927	Rose Amber ^{T}	**12 B 9**
1924	Rose Ash ^{T}	**6 J 9**
1905	Rose, Begonia ^{R}	**2 K 2**
1926	Rose Beige ^{T}	**14 B 7**
1927	Rose Beige No. 2 ^{T} +	**5 A 10**
1926	Rose Blush ^{T}	**5 C 9**
1928	Rose Blush 2 ^{T} +	**12 A 7**
1927	Rose Breath ^{T}	**1 D 7**
1902	Rose, Carnation ^{M}	**1 E 3**
1905	Rose Caroline ^{O}	**2 C 9**
	Rose Carthame ^{P} (Carthamus R)	**1 L 11**
	Rose, Carthamus ^{P} (Carthamus R)	**1 L 11**
1926	Rose Castor ^{T}	**54 C 2**
1892	*Rose Cendre* ^{T} (*Fr.* Ashes of Rose)	**10 A 5**
1892	*Rose d'Alma* ^{T}	**53 F 2**
1905	Rose d'Althæa ^{O}	**1 I 7**
1905	Rose de Nymphe ^{O} − †	**10 B 2**
1892	*Rose de Provence* ^{T}	**53 J 9**
1928	Rose Dawn ^{T}	**3 B 9**
18—	Rose Dorée	**1 K 8**
1924	Rose Ebony ^{T}	**8 E 6**
1905	Rose France ^{O}	**2 B 9**
1925	**ROSE GREY** ^{T}	**7 A 8**
1905	Rose Hermosa ^{O}	**1 F 8**
1905	Rose Hortensia ^{O}	**3 C 9**
18—	Rose Lake ^{P}	**5 I 12**
	Rose Madder ^{P}	**1 I 4**
190-	Rose Malmaison ^{P}	**2 H 6**
1926	Rose Marie ^{T}	**2 I 2**
1928	Rose Morn ^{T} +	**2 B 9**
1905	Rose Neyron	**1 J 4**
1905	Rose Nilsson ^{O}	**2 J 3**
1928	Rose Nude ^{T} +	**11 A 5**
1926	Rose Oak ^{T} +	**6 E 10**
1926	Rose Petal ^{T}	**5 I 4**
1926	Rose of Picardy ^{T}	**5 J 5**
1761	Rose Pink...(see † Rose)	
18—	*Rose Pink* ^{P}	**5 H 12**
1886	Rose-Purple ^{R}	**41 G 5**
1926	Rose Quartz ^{T} +	**53 B 3**
1300	Rose Red....(see † Rose)	
1927	Rose of Sharon ^{T}	**3 K 8**
1927	Rose Soirée ^{T}	**1 J 9**
1924	**ROSE TAUPE** ^{T}	**16 A 4**
1589	Roseate.....(Rose)	
1928	Rosebisque ^{T} +	**3 C 9**
1926	Rosebloom ^{T}	**3 E 9**
1925	**ROSEBUD** ^{T}	**41 H 1**
1926	Rosedust ^{T}	**6 B 2**
1928	Roseglow ^{T}	**5 D 9**
1921	Roseleaf ^{T}	**2 G 8**
1927	Roselustre ^{T} −	**6 L 8**
1922	Rosemary ^{T}	**44 H 4**
1927	Rosestone ^{T}	**6 C 9**
1485	*Roset* ^{P}......(Brazil Red)	**4 K 12**
1928	Rosetan ^{T} −	**12 A 5**
1926	Rosetta ^{T}	**47 C 1**
1923	Rosevale ^{T}	**5 K 9**
1892	Rosewood ^{T} † (F = 8 C 4 −)	**5 J 9**
1912	Roslyn Blue ^{R}	**44 I 12**
	Rouge, Animal ^{P} (Carmine).	**3 K 5**
	Rouge de Fer ^{P} (Bole)	**5 F 11**
1839	Rouge, Mineral ^{P} (red iron oxide)	**6 G 12**
1753	Rouge, Vegetable ^{P} (Carthamus R)	**1 L 11**
1892	**ROYAL BLUE** ^{T} (F + = 36 A 10)	**43 D 12**
155-	*Royal Blue* ^{P} (Smalt)	**43 D 11**
18—	*Royal Blue* ^{P} (Prussian Bl)	
18—	*Royal Green* ^{B} (Brunswick Gr)	
1902	Royal Pink ^{M}	**2 I 4**
1661	**ROYAL PURPLE**	**43 K 11**
1890	Royal Red ^{P} (Imit. Ver.)	
	Royal Yellow ^{P} (Orpiment)	**10 K 3**
1466	*Roys, Royes*..(Rose)	
1923	Rubaiyat ^{T}	**6 J 5**
1924	Rubber ^{T} +	**15 H 8**
1922	**RUBELLITE** ^{T}	**51 L 8**
18—	Ruben's Madder ^{P}	**4 K 11**
1927	Rubient ^{T}	**55 L 8**
1791	*Rubrica* ^{P}....(Bole)	**5 F 11**
1572	**RUBY**	**6 G 6**
1696	*Ruby of Arsenic* ^{P} (Realgar).	**10 L 8**
1538	Ruddle ^{P}.....(Bole)	**5 F 11**
1100	Ruddy......(reddish)	
1782	Rufous	**10 A 10**
1925	Rugby Tan ^{T} +	**14 B 12**
1926	Runnymede ^{T}	**29 K 9**
1562	**RUSSET** †	
1748	**RUSSET BROWN** +	**14 I 12**
1731	Russet Green	**20 K 1**
1905	Russet Orange ^{O}	**2 E 12**
1912	Russian Blue ^{R}	**35 D 4**
1925	**RUSSIAN CALF** ^{T} −	**7 C 12**
183-	Russian Green	**30 D 7**
188-	Russian Grey ^{M} +	**14 A 2**
1926	Russian Violet ^{T} +	**44 K 11**
1692	Rust	**6 A 12**
1590	*Rust Brown*	
1831	*Rust Yellow* ^{P}	?
1811	Rustic Brown ^{T}	**7 H 11**
1902	Rustic Drab ^{B}	**14 B 5**
1374	Sable........(Black)	
1892	*Sable* ^{T} +....(the fur)	**14 B 7**
1921	Saddle ^{T} +	**15 C 10**
1412	Sad (dull, sober, dark)	
1660	*Sad-coloured*	
15 —	*Sadnew colour* ^{T} (?)	?
1600	*Safaran*.....(Saffron Y).	**10 K 8**
	Safflor ^{V} (Carthamus R)	**1 L 11**
1583	Safflower Red ^{V} (Carthamus R)	**1 L 11**
1200	Saffron Yellow ^{V}	**10 K 8**
1657	*Croceus* ^{V}	
1659	*Crocus* ^{V}	
1647	*Crocreal* ^{V}	
1912	Safrano Pink ^{R}	**1 B 9**
1596	**SAGE [GREEN]** †	**22 I 5**
1892	*Sage Drab* ^{F}	**23 E 5**
1705	*Sage Grey*	**13 C 2**
1925	Sagebrush Green ^{M}	**16 E 5**
1921	Sahara ^{T} −	**7 E 12**
1923	Sailor ^{T} +....(see † Navy)	**48 C 9**
1912	Sailor Blue ^{R}	**44 D 10**
1923	Sakkara ^{T} +	**15 C 6**
1000	Sallow	**12 E 2**
1776	**SALMON [Pink]** †	**10 A 7**
1922	Salvia ^{T}	**3 L 6**
1912	Salvia Blue ^{R}	**33 D 10**
1922	Samara ^{T} +	**30 L 6**
1925	Samovar ^{T}	**12 K 7**
1925	Samurai ^{T}	**4 H 11**
1627	**SAND** − †	**13 B 2**
1923	**SANDALWOOD** ^{T}	**14 A 7**
1511	*Sandalwood* ^{V} (Redwood)	
1398	*Sandarach, -a* ^{P} (Red Lead)	**1 I 12**
1398	*Sandarach, -a* ^{P} (Realgar).	**10 L 8**
17—	*Sanders Blue* ^{P} (Cendres Bl)	**36 K 7**

1329	*Sanders, -wood* ^{V} *(Sandalwood)*	
16—	*Sandix, Sandyx* (Red Lead)	1 I 12
1928	Sandrift ^{T} –	14 A 3
1925	Sand Dune ^{T}	14 B 5
1927	**SANDUST** ^{T}	3 A 9
1902	Sandstone	13 A 6
1928	Sandy-Beige ^{T}	14 A 3
1912	Sanford's Brown ^{R}	13 A 12
1886	Sang de Boeuf ^{C} (*Fr.* Beef's Blood)	7 L 9
1382	Sanguine....(Blood Red)	3 L 11
1727	*Santalwood* ^{V}. (Redwood)	
1926	Santos ^{T}	15 A 9
1928	Saona ^{T}	6 F 11
1578	*Sap Green* ^{P}	22 K 1
18—	*Leek Green*	
182–	*Verde Vessie* ^{P}	
1598	*Sapanwood* ^{V} (Redwood)..	5 K 9
1430	**SAPPHIRE [BLUE]** (F=37 E 10)	37 L 8
1413	Sapphirine	
1892	*Sappho* ^{T}	44 C 1
1925	Saraband ^{T}	6 K 8
1922	Saratoga ^{T}	11 J 8
1928	Saravan ^{T} +	6 B 11
1925	Sarouk ^{T} +	7 C 9
1927	Satinwood ^{T} +	6 B 10
1921	Satsuma ^{T} +	3 D 11
1835	Saturn Red ^{P} (Red Lead).	1 F 12
1835	*Saturnine Red* ^{P} (Red Lead)	1 F 12
1892	*Saul* ^{T}	39 H 1
1440	*Saunders Blue* ^{P} (Cendres Bl)....	36 K 7
1892	*Sauterne* ^{F}	10 J 5
1926	Sauterne ^{T}	13 C 8
1915	**SAXE BLUE** ^{T} †	36 I 6
1753	*Saxon, -y Blue* (Indigo Carmine) (F=44 E 12)....	37 J 7
1753	*Saxon Green* (F=26 C 11)	36 K 1
155–	*Saxony Blue* ^{P} (Smalt)....	43 D 11
179–	*Saxony Green* ^{P} (Cobalt Green)	20 D 9
1912	Sayal Brown ^{R}	13 G 9
1892	*Scabiosa* ^{T}	45 G 7
1920	Scarab ^{T}	28 K 9
1250	**SCARLET** †	1 L 12
	Scarlet Lake ^{P}	3 L 11
18—	Scarlet Madder ^{P}	1 H 8
1590	Scarlet Red ^{R} † (Scarlet)..	1 L 12
1882	Scarlet Vermilion ^{P}	2 I 12
1386	*Scarlet in grain* ^{T} (Kermes)	1 L 12
1778	Scheele's Green ^{P}	19 L 8
18—	*English Green*	
1788	*Swedish Green*	
1912	Schoenfeld's Purple ^{R}	53 I 9
1814	*Schweinfurt Green* ^{P} (Emerald Gr)..	26 C 11
1814	Scotch Blue	47 E 12
180–	Scotch Grey	21 A 2
1928	Seabird ^{T} –	15 A 2
1850	Sea Blue – (R's Sea Green)..	29 L 4
1606	*Sea-coale, Seacole,* ^{P} (brownish-black)	
1928	Seacrest ^{T}	19 A 6
1920	Seafoam ^{T}	17 A 9
1892	Seafoam Green (F=19 A 7) R=	18 D 2
1912	Seafoam Yellow ^{R}	17 C 2
1598	**SEA GREEN** †	19 K 6
1925	Sea Hawk ^{T}	47 A 1
1928	Seaman Blue ^{T} + (see † Navy)	47 E 11
1928	Sea Mist ^{T} –	45 B 3
1925	Sea Moss (a) ^{T} + †	22 L 1
1926	Sea Moss (b) ^{T} + †	31 H 7
1928	Sea Pink ^{T}	2 I 7
1927	Seasan ^{T} +	11 A 4
1922	Seaside ^{T}	14 A 4
1926	Sea Shell ^{T} († Shell Pk)...	11 A 7
1901	Seashell Pink († Shell Pk).	10 A 4
1922	Seaside ^{T}	13 B 4
1926	Seaspray ^{T} +	20 B 6
1588	*Sea-water Green* (Sea Green)	19 K 6
1898	Seaweed Green ^{B}	21 B 5
1882	**SEAL [BROWN]**	8 E 10
1892	Sedge ^{T} + (F=18 A 3)....	15 A 8
1928	Seed Pearl ^{T}	11 B 2
1705	*Seladon Green* (Celadon Gr)....	21 B 4
1902	Seered Green ^{B}	20 K 3
1926	Seminole ^{T}	14 E 10
	SEPIA †	8 A 10
18—	Sepia, Roman	7 A 11
18—	Sepia, Warm	7 C 10
1925	Serapi ^{T}	37 F 5
1892	Serpent ^{T} (F+=30 D 5).	29 D 5
1922	Serpentine ^{T}	26 I 9
1912	Serpentine Green ^{R} +	14 K 3
1918	Service Corps ^{T}	30 K 12
1925	Seville ^{T}	42 L 12
1899	*Seville Orange*	11 C 9
18—	Sevres [Blue] (F+=36 J 4)	34 K 9
1926	Shadow ^{T}	46 C 1
1928	Shadow Green ^{T}	20 J 3
1927	Shagbark ^{T} +	14 C 7
	Shale Green ^{P} (Malachite Gr)......	28 A 9
182–	Shamrock [Green]	21 C 9
1921	Shark ^{T}	47 C 3
1551	*Sheep's Color* ^{T}	?
1923	Sheepskin ^{T}	11 C 3
1924	Sheik ^{T}	3 J 11
1902	**SHELL GRAY** –	44 A 1
1865	**SHELL PINK** †	
1871	Sherry [Brown] +	15 C 12
1925	Shirvan ^{T}	24 C 10
18—	Shrimp [Pink, Red] †	1 E 10
1892	*Siam* ^{T}	15 H 11
	Siberian Brown ^{B}	15 L 9
1892	*Siberien* ^{F}	31 J 5
	Sicilian Umber ^{P} (Raw Umber)	15 L 12
	Siderin Yellow ^{P} (Mars Y)	11 L 9
1874	Siena ^{T} †	6 I 12
1853	Sienna Brown ^{B} +	7 E 12
	SIENNA, BURNT ^{P}	5 F 12
17—	**SIENNA, RAW** ^{P} +	13 L 10
	Italian Ochre	
1787	*Sienna Earth*	
1760	Terra Siena	
1814	*Sienna Yellow*	10 F 4
187–	Siennese Drab ^{M} +	14 A 6
1925	Sierra ^{T}	6 I 12
1902	Signal Red ^{B} +	2 L 11
1601	*Sil* ^{P} (Yellow Ochre).....	11 L 7
1880	*Silk Green* ^{P} (Chrome Green)	
189–	Silurian Grey ^{B}	19 B 2
1481	**SILVER** †	
	New Silver	37 A 2
	Old Silver	38 A 1
1927	Silver Fern ^{T}	14 J 2
188–	Silver Green	21 F 3
1607	Silver Grey † (Silver)	
1928	Silverpine ^{T}	30 E 5
	Silver White (Silver)	
1928	**SILVERWING** ^{T} +	52 A 2
1926	Sinbad ^{T} –	48 A 12
1412	*Sinoper* ^{P} (Red Ochre; Madder Lake)	
13—	*Sinopis* ^{P} (Red Ochre; Madder Lake)	
1450	*Sinople* ^{P}....(Sinoper)	
1489	*Sinople* ^{H}....(Green)	
1923	Sirocco ^{T} +	14 B 2
1805	*Siskin Green*	19 J 2
1923	**SISTINE** ^{T}	35 H 5
1916	Skating ^{T}	37 L 7
1916	Ski ^{T}	29 D 12
1814	Skimmed-Milk White (see † Milk)	26 A 2
1912	Skobeloff Green ^{R}	25 K 9
1728	**SKY BLUE** †	33 E 6
1586	Sky, Sky Colour	
1905	Sky Green ^{O} †	18 I 5
1912	Sky Grey †	34 B 2
1921	Slag ^{T}	48 A 4
1801	**SLATE [COLOR]** +	47 C 6
1886	Slate-Black ^{R} +	48 C 6
1796	Slate-Blue –	46 A 7
1912	Slate-Green [Deep] ^{R} +	31 C 5
1705	Slate-Grey + †	14 A 2
1912	Slate-Olive ^{R} –	23 A 3
1912	Slate-Purple ^{R}	46 I 6
1905	Slate Violet ^{O} †	6 I 8
15—	Smalt ^{P} †	43 D 11
15—	*Asmalte*	
16—	*Cobalt Glass*	
	Dumont's Blue	
1751	*Dutch Azure*	
155–	*Enamel Blue*	
1761	*Eschel Blue*	
155–	*King's Blue*	
16—	*Laundry Blue*	
1707	*Powder Blue*	
155–	*Royal Blue*	
155–	*Saxony Blue*	
15—	*Smaltino*	
155–	*Starch Blue*	
155–	*Zaffre Blue*	
179–	*Smalt Green* ^{P} (Cobalt Green)	20 D 9
1651	*Smaragdine* (Emerald Green)	
1886	**SMOKE** †	
1901	Smoke Blue	47 A 6
1806	Smoke Brown	16 A 2
1805	Smoke Grey + (R=13 A 2+)	28 A 2
1839	Smoke Yellow	13 B 2
1712	*Smoke Black* ^{P} (Lamp Black)	
1885	Smoked Pearl ^{T}	46 B 3
1924	Snapdragon ^{T}	10 J 4
1916	Snowshoe ^{T}	10 K 7
1000	Snow-White †	
1698	Snuff [Brown] †	
1927	Soapstone ^{T}	15 A 7
1865	Solferino.....(F=52 J 7).	4 E 5
18—	*Solitaire* ^{T}	8 H 6
1892	*Somalis* ^{T}	5 I 11
1924	Sombrero ^{T}	11 D 4
1925	Sonora ^{T}	13 A 10
1715	Soot Black ^{P} (Lamp Black)	
1600	Soot Brown ^{P} (Bistre ^{P})..	15 C 9
1611	Soot Color...(Black)	
1912	Sooty Black ^{R}	48 C 5
1892	*Sorbier* ^{T} (*Fr.* service-tree)	53 H 3
1912	Sorghum Brown ^{R}	6 B 9
1925	Sorolla Brown ^{T} +	6 A 12
1469	Sorrel.......(F=.......	13 J 11
1912	Sorrento Green ^{R}	29 L 3
1789	*Souci* ^{T} (*Fr.* Marigold Y)..	9 L 10
1892	*Source* ^{T} (*Fr.* spring, well).	28 B 6
1600	*Spalte, Spaltum* ^{P} (Asphaltum)...	8 H 11
1839	*Spanish Black* ^{P} (Burnt Cork)	
1549	Spanish Brown ^{P} (Indian R)....	6 L 12
1927	Spanish Cedar ^{T}	6 J 10
1705	*Spanish Flesh* ^{T} (Carnation)..	11 B 2
14—	*Spanish Green* ^{P} (Verdigris)..	28 B 7

1926	Spanish Raisin ^{T}	48 L 3
1854	*Spanish Red* ^{P} (an ochre)	6 G 12
18—	*Spanish Red* ^{V} (Carthamus R).	1 L 11
1928	Spanish Wine ^{T}	7 J 6
1925	**SPANISH YELLOW** ^{T}	10 L 7
1920	Spark ^{T}	2 L 10
1920	Sparrow ^{T}	15 C 6
1924	Spa-Tan ^{T}	12 D 12
1917	Spearmint ^{T}	25 L 12
1921	Sphinx ^{T}	15 E 8
1922	Spice ^{T}	13 B 12
1896	Spinach Green	22 K 7
1912	Spinel Pink ^{R}	51 K 1
1912	Spinel Red ^{R}	3 H 5
1601	*Spodium, spode* ^{P} (zinc oxide white)	
1845	Sponge ^{T} +	14 C 5
1916	**SPRAY**	25 D 3
1922	Spring Beauty ^{T}	50 J 5
1766	**SPRING GREEN**	18 J 7
1924	Springtime ^{T}	2 J 9
1920	Sprite ^{T}	25 K 6
1916	Spruce	32 H 6
1738	Spruce Yellow	12 K 8
1912	Squill Blue ^{R}	34 I 6
1924	Squirrel ^{T} +	55 A 2
1895	*St. Benoit* ^{T}	8 E 9
1920	Stag ^{T}	14 E 7
155-	*Starch Blue* ^{P} (Smalt)	43 D 11
1928	Stardew ^{T}	35 F 7
1928	Starflower ^{T}	43 G 3
1927	Starlight ^{T}	34 E 6
1928	Starling ^{T} —	15 A 6
1902	Starling's Egg Green ^{B}	27 B 2
1493	**STEEL** ^{T}	47 A 4
1817	Steel Blue ^{P} † (Prussian Blue)	
1493	**STEEL GREY**	47 A 4
1926	Steeplechase ^{T}	43 F 11
17—	*Stil de Grain Brown* ^{P} (Br. Pink)	12 L 8
17—	*Stil de Grain Yellow* ^{P}	10 K 2
1758	Dutch Pink	
17—	English Pink	
1758	Italian Pink	
17—	*Yellow Madder*	
1663	**STONE**	
	LIGHT STONE	12 J 5
	MIDDLE STONE +	12 J 6
	DEEP STONE	13 L 7
1654	*Stone Blue* ^{P} (Azurite Blue)	36 K 7
17—	*Stone Green* ^{P} (Terre Verte)	
1878	**STONE GREY** (F = 22 B 3)	31 A 2
1761	Stone Yellow ^{P}	?
1912	Storm Grey ^{R}	30 C 2
1589	**STRAW** [Yellow]	10 F 2
1675	**STRAWBERRY**	5 H 5
1912	Strawberry Pink ^{R}	1 H 10
	Striegau Earth ^{P} (Bole)	5 F 11
1926	Stroller Tan ^{T}	14 C 9
1854	Strontian Yellow ^{P}	10 L 1
1924	Stucco ^{T} —	14 A 5
1905	Succory Blue ^{O} + (Chicory Bl)	28 A 2
1892	Sudan ^{T} (F+ = 14 K 9)	13 E 4
1912	Sudan Brown ^{R}	14 L 12
1888	*Suede* ^{T}	14 D 8
1926	Sugar Cane ^{T}	10 B 6
1892	*Sulfur* ^{T}	10 J 1
1905	Sulphate Green ^{R}	26 J 8
1912	Sulphin Yellow ^{R}	12 L 4
1805	**SULPHUR [YELLOW]** †	10 J 1
1651	Sulphureous	
1892	Sultan ^{T} (F = 7 A 6)	4 K 6
1923	Sultana ^{T}	7 C 5
1916	Sumac ^{T}	14 L 8
1890	*Sun* ^{T}	?
1917	Sunbeam ^{T}	11 K 5
1766	*Sun-brown* ^{T} (a purple)	?

1925	**SUNBURN** ^{T}	13 A 7
1590	Sunburnt	13 A 7
1921	Sunburst ^{T}	10 K 9
1928	Sundown ^{T}	11 B 6
1892	Sunflower [Yellow] †	9 L 4
1924	Sunglow ^{T} +	2 J 10
1926	Sungod ^{T}	2 H 12
1927	Sunkiss ^{T}	9 K 9
1928	Sunlight ^{T}	10 H 4
1926	Sunni ^{T}	10 I 4
1926	Sunray ^{T}	10 J 6
1928	Sunrise Yellow ^{T}	10 C 7
1916	**SUNSET** ^{T}	10 C 4
1928	Sunstone ^{T}	12 F 12
1926	Suntan ^{T}	13 B 7
1919	Superior ^{T} +	30 L 3
1705	*Surbrun* ^{T}	?
1926	Surf Green ^{T}	20 C 7
184-	Surrey Green ^{B}	20 A 4
1920	Swamp ^{T}	24 A 9
1000	Swart (black, dark)	
1788	*Swedish Green* ^{P} (Scheele's Gr)	19 L 8
1920	Sweet Briar ^{T}	1 C 4
1926	Sweetmeat ^{T}	11 C 5
1921	Sweet Pea ^{T}	51 C 2
1927	Sweet William ^{T}	1 I 9
1927	Swiss Blue ^{T}	46 A 7
1927	Swiss Rose ^{T}	4 K 2
14—	*Synaper* . . . . (*Sinoper*)	
1917	Syrup ^{T}	14 L 8
1894	Tabac (*Fr.* Tobacco, †)	
1922	Taffy ^{T}	12 E 6
1925	Talavera ^{T}	12 A 12
1910	Tally-Ho ^{M}	16 A 12
1927	Tamarack ^{T} +	15 C 8
1924	Ta-Ming ^{T}	10 L 6
1590	**TAN** (see † Leather)	12 L 11
1927	Tanagra ^{T}	7 J 9
1926	Tanaura ^{T}	12 D 4
1924	**TANBARK** ^{T}	14 B 8
1899	**TANGERINE**	2 H 11
1925	Tangier ^{T}	10 L 11
1925	Tango Pink ^{T}	3 J 8
1928	Tansan ^{T} +	12 B 6
1892	*Tapestry* ^{T}	45 B 4
1917	Tapestry ^{T}	39 H 11
1923	Tapestry Red ^{T}	7 J 5
1895	*Tapis vert* ^{P} (*Fr.* grass, lawn)	21 L 5
1925	**TARRAGON** ^{T}	21 B 7
1927	Tarragona ^{T} —	6 G 12
1924	Tartan Green ^{T} +	24 E 11
18—	**TAUPE** † . . . . (*Fr.* Mole)	16 A 6
1377	Tawny †	13 D 10
1927	Tawny Birch ^{T}	13 A 6
1502	*Tawny Green* ^{T}	?
1839	*Tawny Grey* ^{T}	?
1751	Tawny Olive	?
1812	*Tawny Yellow* ^{T}	?
1829	Tea	19 A 4
1858	Tea Green	21 C 2
1884	**TEA ROSE** †	
1928	Tea Time ^{T} +	13 B 4
1902	Teak [Brown] ^{B} + (Sienna Brown)	7 E 12
1924	Teakwood ^{T}	15 C 9
1927	Teal Blue ^{T} +	39 L 6
1917	Teal Duck ^{T}	39 L 7
1892	Telegraph Blue	45 B 7
1916	Tennis ^{T}	12 L 6
1688	*Tenné, Tenny* (Tawny)	
180-	Terra Brown ^{M} †	
1817	*Terra Columbiana* ^{P} †	
1882	**TERRA COTTA** †	4 D 12
1683	*Terra Japonica* ^{V} (Catechu).	7 C 11
1613	*Terra Lemnia* ^{P} (Bole)	5 F 11
1753	*Terra Merita* ^{P} (Tumeric)	10 J 2
	Terra Orellana ^{V} (Annatto)	10 A 7
	Terra Pozzuoli ^{P} (Bole)	5 F 11

1753	Terra Rosa ^{P} (Bole)	5 F 11
1760	Terra Siena ^{P} (Raw Sienna)	13 L 10
1547	Terra Sigillata ^{P} (Bole)	5 F 11
1738	*Terra Umber* ^{P} (Raw Umber)	15 L 12
1924	**TERRAPIN** ^{T}	14 B 10
1789	*Terrasse Green* ^{T} (Grass Gr)	21 L 5
1658	Terre Verte ^{P} †	
	Bohemian Earth	
	Celadon Yellow	
	Cyprian Earth	
	Cyprian Green	
1794	Green Earth	
	Green Ochre	
1398	*Holy Green, Holly Green*	
	Italian Green	
	Permanent Green	
17—	*Stone Green*	
	Tyrol Green	
	Tyrolese Earth	
1398	*Verdetto*	
17—	*Verona Earth*	
1835	*Verona Green*	
17—	*Veronese Earth*	
	Terre Verte, Burnt ^{P} (Verona Br).	7 A 11
	Terre Verte, Olive ^{P}	22 L 1
1688	Testaceous. (see † Brick R)	4 B 11
1802	*Thenard's Blue* ^{P} (Cobalt Bl)	34 L 7
1892	Thistle †	42 J 7
1925	Thistle Bloom ^{T} (see † Thistle)	51 D 10
1926	Thistletuft ^{T} (see † Thistle)	54 A 12
1789	*Thorn Grey* ^{T}	?
1766	*Thought Color* ^{T} (see † Pansy)	
1902	Thrush [Brown]	14 C 7
1912	Thulite Pink ^{R}	50 I 1
1916	Thyme ^{T} +	31 E 6
1924	Tiber ^{T}	30 J 11
1912	Tiber Green ^{R}	18 E 6
1922	Tiffin ^{T} +	14 K 10
1922	Tigerlily ^{T}	1 F 11
1922	Tile Blue ^{T}	36 J 6
1705	Tile Red	3 D 12
1884	*Tilleul* [*Green*] + (see † Lime Gr)	18 E 1
1912	Tilleul Buff ^{R} +	10 A 2
1917	Tinsel ^{T}	13 L 7
1923	Titania ^{T}	54 F 11
1896	Titian	13 J 12
1926	Titian Gold ^{T}	13 A 11
1892	*Titiens* ^{T} . . . . (*Fr.* Titian).	12 K 7
1905	Titmouse Blue ^{O} (Mesange)	36 F 1
1922	**TOAST** ^{T}	13 F 8
1927	Toasted Almond ^{T} +	13 B 8
1924	Tobac ^{B} (see † Tobacco)	
1789	Tobacco [Brown] †	
1916	Toboggan ^{T}	1 B 12
1924	Toga ^{T}	45 K 11
1926	Tokay ^{T} +	6 G 10
1924	Tokyo ^{T}	9 B 11
1924	Toltec ^{T}	11 B 7
1891	Tomato [Red] †	3 I 12
1928	Tommy Red ^{T}	3 L 9
1572	**TOPAZ**	12 I 8
1925	Toreador ^{T}	2 K 12
1928	Torino Blue ^{T} +	38 C 8
1730	Tortoise ^{T}	14 C 12
1924	Tortoise Shell ^{T}	14 G 11
1926	Totem ^{T}	4 J 12
1928	Touquet ^{T}	4 B 8
1927	Tourmaline ^{T}	26 H 2
1912	Tourmaline Pink ^{R}	43 I 2
18—	*Tourterelle* ^{T} (*Fr.* Turtle-dove)	13 B 4

1789	*Tourville Green* ^{T}	?
	Transparent Gold Ochre ^{P}	12 L 9
1923	Traprock ^{T}+	15 A 2
1925	Travertine ^{T}	14 C 4
	Trentanel ^{V} (Broom)	11 J 1
1925	Trianon ^{T}	9 B 7
1705	*Tristamie* ^{T} (<*Fr.* tristement=sadly; a brown Crimson	?
1924	Triton ^{T}	31 L 11
1928	Triumph Blue ^{T}	37 H 11
1919	Trooper ^{T}	40 L 9
1928	Trotteur Tan ^{T}	7 E 11
1927	Troubador Red ^{T}	3 L 8
1928	Trublu ^{T}+	35 G 6
1415	*True Blue* ^{T} (Indigo or Woad)	
1924	Tuileries ^{T}	35 J 7
1927	Tulip Wood ^{T}–	7 C 11
1923	Tunis ^{T}–	40 C 12
1839	*Turbith Mineral* ^{P} (*Queen's Y*)	10 J 2
1669	*Turkey Blue* ^{T}	37 A 9
1841	*Turkey Berries* ^{V} (Persian Berries)	10 L 6
1747	Turkey Red ^{T}	4 L 9
	Turkey Umber ^{P} (Raw Umber)	15 L 12
1662	*Turkish Blue* ^{T} (F=26 D 1)	37 A 9
1902	Turkish Crescent Red ^{M}	5 L 12
1900	Turkish Red ^{T} (Turkey Red)	4 L 9
1607	Turmeric ^{V}	10 J 2
1617	*Curcuma*	
1727	*Indian Saffron*	
1753	*Terra Merita*	
	Turnbull's Blue ^{P} (Prussian Bl)	
1781	*Turner's Yellow* ^{P}	10 K 3
1782	*Cassel Yellow*	
1782	*Kasseler Yellow*	
1844	*Mineral Yellow*	
185–	*Montpellier Yellow*	
1781	*Patent Yellow*	
185–	*Verona Yellow*	
185–	*Veronese Yellow*	
1573	**TURQUOISE [BLUE]**	25 J 2
190–	**TURQUOISE, BLUE** ^{T}	25 K 2
1845	Turquoise Green	25 I 5
1924	Turtle ^{T}	7 E 12
1925	**TURTLEDOVE** ^{T}	55 C 1
1912	Turtle Green ^{R}	19 G 5
1887	*Tuscan* ^{T}	10 E 5
1913	Tuscan Brown ^{M}	7 H 12
18—	**TUSCAN RED** ^{P}+ (Madder Indian R)	7 L 8
1926	Tuscan Tan ^{T}	13 C 8
1922	Tuscany ^{T}+	7 L 11
1887	*Tussore* ^{T}	10 A 4
1920	Twilight [Blue]	36 G 6
1705	Twilight Grey ^{T} (Evening Gy)	?
1918	Twine	14 B 3
1927	Twinkle Blue ^{T}	34 I 5
1890	Tyrian Blue	37 C 8
1912	Tyrian Pink ^{R} †	50 J 6
1586	Tyrian Purple †	
1905	Tyrian Rose	
1926	Tyrian Violet ^{T} †	44 K 5
1892	*Tyrol* ^{T}	15 L 11
	Tyrol Green ^{P} (Terre Verte)	
	Tyrolese Earth ^{P} (Terre Verte)	
	Tyrolese Green ^{P} (Malachite Gr)	28 A 9
1925	Tyrolian ^{T}	32 A 12
1912	Tyrolite Green ^{R}	25 J 8
1892	*Tzarine* ^{T}–	32 C 11
1598	**ULTRAMARINE [BLUE]** ^{P} genuine	35 G 12
1826	**ULTRAMARINE, ARTIFICIAL** ^{T}+	41 F 12
1862	French Blue	
1832	French Ultramarine	
1828	Gmelin's Blue	
1826	Guimet's Blue	
18—	New Blue	
18—	*Oriental Blue*	
18—	Permanent Blue	
1868	Ultramarine Ash, blue ^{P}	35 B 9
1839	Ultramarine Ash, grey ^{P}	28 B 1
1686	Ultramarine Green ^{P}	32 C 10
1868	*Ultramarine Yellow* ^{P} (Zinc Y)	10 L 4
1649	**UMBER, BURNT** ^{P} †	15 L 12
18—	Manganese Velvet Br	
18—	*Velvet Brown*	
1600	**UMBER, RAW** ^{P} †	15 L 12
	Cyprus Earth	
	Cyprus Umber	
	Roman Umber	
	Sicilian Umber	
1738	*Terra Umber*	
	Turkey Umber	
1927	Vagabond Green ^{T}+	31 L 6
1925	Valencia ^{T}	49 H 5
1919	Vanda ^{T}	43 E 4
1850	**VANDYKE BROWN** ^{P}	7 A 11
183–	Cassel Brown	
183–	Cassel Earth	
183–	*Castle Earth*	
1839	*Castile Earth*	
17—	*Cologne Brown*	
1764	Cologne Earth	
1600	*Cullen Earth*	
18—	*Vandyke Madder* ^{P}	3 I 4
1912	Vandyke Red ^{R}	6 K 4
1925	Vanilla ^{T}	10 C 3
1927	Vanity ^{T}+	3 A 9
1912	Variscite Green ^{R}	25 B 7
1912	Varley's Grey ^{R}	45 D 6
1926	Vassar Rose ^{T}	3 I 2
1925	Vassar Tan ^{T}	6 A 11
1922	Vatican ^{T}	45 L 12
1895	*Veau d'or* ^{T} (*Fr.* golden calf)	10 E 6
	Vegetable Red ^{V} (Carthamus R)	1 L 11
1925	Velasquez ^{T}	54 K 10
1588	*Velvet Black* ^{P} (Ivory Bk)	
18—	*Velvet Brown* (Burnt Umber)	15 L 12
1902	Velvet Green ^{B}	22 L 8
1425	*Venet* †	27 K 2
178–	Venetian Blue ^{P} (Cobalt Blue)	34 L 7
1924	Venetian Fuchsia ^{T}	51 K 11
1899	Venetian Green ^{M}	30 K 8
	Venetian Lake ^{P} (Carmine)	3 K 5
1902	Venetian Pink	2 F 7
1753	**VENETIAN RED** ^{P} (see † Oxide R)	6 I 12
1923	Venetian Rose ^{T}	5 L 1
15—	*Venetian Scarlet* (Kermes)	1 L 12
187–	Venetian Yellow ^{M}	10 J 3
1927	Venezia ^{T}	36 K 6
1654	*Venice Berries* ^{V} (Persian Berries)	10 L 6
1598	Venice [Blue] (Turquoise Bl)	27 K 2
1912	Venice Green ^{R}	25 J 6
	Venice Red ^{P} (Bole)	5 F 11
1892	*Venus* ^{T}	12 L 5
1912	Verbena [Violet] †	42 B 6
1581	Verdant Green	20 K 5
1902	Verdant Grey (see † Terre Verte)	
1558	*Verdet* ^{P} (*Fr.* Verdigris)	28 B 7
1598	*Verdetto* ^{P} (Terre Verte)	
1598	*Holy Green*	
182–	Verde Vessie ^{P} (*Fr.* Sap Green)	22 K 1
1530	*Verd Gay (Popinjay Green)*	21 L 6
1336	Verdigris ^{P} [Green]	28 B 7
16—	*Crystals of Venus*	
17—	*Distilled Green*	
	Montpellier Green	
14—	*Spanish Green*	
1558	*Verdet*	
1505	*Verditer, Blue* ^{P} (see † Bice)	36 K 7
1764	*Blue Ashes*	
1763	*Cendres Blue*	
17—	*Sanders Blue*	
1440	*Saunders Blue*	
	Copper Blue	
1700	*English Blue*	
17—	*Lime Blue*	
17—	*Mineral Blue*	
1551	*Verditer, Green* ^{P} (Malachite Gr)	28 A 9
13—	Verdure ^{T}	22 A 12
1892	*Veridine Green* ^{F}	26 C 9
1289	**VERMILION** ^{P} (see below)	
1400	*Vermayle*	
1549	*Vermeil*	
1530	*Vermelet*	
1592	*Vermile*	
	Vermilion, American ^{P} (Imit. Ver.)	
13—	Vermilion, Chinese ^{P}	2 L 11
	Vermilion, Dutch ^{P}	2 K 12
	Vermilion, English ^{P}	3 L 10
1835	Vermilion, Field's Orange ^{P}	2 F 12
	Vermilion, French ^{P}	2 J 12
	Vermilion, Green ^{P} (Cinnabar Gr)	
1598	**VERMILION, IMITATION** ^{P} †	
18—	*American Vermilion*	
1902	Carmetta	
189–J	Carminette	
	Chinese Red	
1809	Chrome Red	
	Derby Red	
1835	Empire Red	
1914	Imperial Red	
18—	Imperial Scarlet	
1907	Mercury Red	
1902	Norman Crimson	
1902	Norman Red	
1902	Ottoman Red	
1897	Persian Red	
1890	Royal Red	
188–	Vermilionette	
188–	Victoria Red	
18—	*Vienna Red*	
	Vermilion, Orange ^{P}	2 G 12
	Vermilion, Scarlet ^{P}	2 I 12
188–	Vermilionette ^{P} (Imit. Ver.)	
1912	Vernonia Purple ^{R}	6 A 5
1889	Verona Brown ^{P} (Bt. Terre Verte)	7 A 11
17—	*Verona Earth* ^{P} (Terre Verte)	
1835	*Verona Green* ^{P} (Terre Verte)	
185–	*Verona Yellow* ^{P} (Turner's Y)	10 K 3
17—	*Veronese Earth* ^{P} (Terre Verte)	
186–	Veronese Gr, [French] ^{P} (Chrom. Ox., tr.)	28 K 11
18—	*Veronese Green, Paul* ^{P} (Emerald Gr)	26 C 11
185–	*Veronese Yellow* ^{P} (Turner's Y)	10 K 3
1919	Veronica ^{T}	43 H 9
1926	Versailles ^{T}	35 J 3
1481	Vert, Verte (*Fr.* Green)	

1927	Vert De Gris ^{T} (see † Verdigris)	
1895	Vert Russe (*Fr.* Russian Gr)	30 D 7
1922	Vervain ^{T} † (Verbena)	42 B 6
1562	*Vesse, Vessey* (a Turquoise blue)	
1916	**VESTAL** ^{T}	44 F 4
1916	Veteran ^{T}	47 A 11
1912	Vetiver Green ^{R}	22 G 1
1924	Victoria ^{T}	46 J 9
1881	Victoria Blue	36 I 11
1892	*Victoria Green* ^{F}	27 G 5
	Victoria Green ^{P} (Brunswick Gr)	
1912	Victoria Lake ^{R} +	7 H 4
188–	Victoria Red ^{M} (Imit. Ver.)	
1835	*Vienna Blue* ^{P} (Cobalt Blue)	34 L 7
1910	Vienna Brown ^{M}	15 H 12
18 —	Vienna Green ^{P} (Emerald) Gr)	26 C 11
	Vienna Lake ^{P} (Carmine)	3 K 5
1902	Vienna Smoke	16 A 2
18—	*Vienna Red* ^{M} (Imit. Ver.)	
1895	*Vin Rosé* ^{T} (*Fr.* red wine)	6 C 6
1688	Vinaceous †	
1818	*Vine-leaf Green* ^{T}	?
1927	Vineyard ^{T}	55 L 12
1834	Vinous †	
1923	Viola ^{T}	42 H 7
1657	Violaceous (Violet)	
1370	**VIOLET**	
16—	Violet-Carmine (from Alkanet)	46 L 9
1903	Violine ^{T} (*Fr.* Wallflower)	42 I 10
1917	Virgin ^{T}	35 K 7
1600	*Virid* (Green)	
1688	*Virideous* (Green)	
186–	**VIRIDIAN** ^{P} (Chromium Oxide, tr.)	28 K 11
1899	*Viridene* ^{P}	
1899	Viridine Green †	17 I 6
1912	Viridine Yellow ^{R}	17 L 7
1412	*Vitelline* (Yolk Y)	10 L 5
1786	*Vitellinous*	10 L 5
1874	Vitreous (Glass Green)	18 F 3
1912	Vivid Green ^{R} †	
1386	*Wachet, Watchet* (light blue)	
1386	*Waget*	
1536	*Wattshode, Wetshode*	
1883	Wallflower [Brown] +	6 L 10
1912	Wall Green ^{R}	28 L 8
1654	**WALNUT** [Brown] †	12 E 6
1912	Warbler Green ^{R}	14 L 3
	Warm Sepia ^{P}	7 C 10
1425	*Water-color* (Venet)	27 K 2
1905	*Water Blue* ^{P} (Bremen Blue)	36 K 1
1883	Water Cress ^{T} (Cress)	22 K 6
1921	Waterfall ^{T}	28 K 1
1892	Water Green (F – =29 F 6) R =	19 C 2
1705	*Water Grey* ^{T}	14 B 1
1927	Water Lily ^{T} (see † Nymphea)	
1850	*Waterloo* ^{T}	47 A 12
1926	Watermelon ^{T}	1 K 9
1925	Water Sprite ^{T}	17 I 8
1925	Watteau ^{T}	34 J 6
13—	*Wau* ^{V} (Weld)	11 K 1
1621	*Wave Green* (Sea Green?)	?
1887	Wax Brown +	14 L 9
1592	Wax Red	4 I 11
1842	Wax White, Wax Color	11 D 1
18—	Waxen	
1805	Wax Yellow	11 L 4
1928	Weathered Oak ^{T} –	8 L 11
1892	**WEDGWOOD [BLUE], LIGHT** †	37 B 7
1892	**WEDGWOOD [BLUE], DARK** †	45 G 11
190–	Wedgwood Green †	22 F 3
190–	Wedgwood Grey †	
1919	**WEIGELIA** ^{T}	3 I 3
1374	*Weld* ^{V}	11 K 1
12—	Gaude	
14—	*Olde, Oold*	
14—	*Wald,* Wau	
17—	*Wield*	
14—	*Woald, Wod, Wold*	
1921	Westminster ^{T}	41 I 12
1918	West Point ^{T}	38 A 6
1711	*Wheat* ^{T}	10 F 5
1927	Whippet ^{T}	15 L 10
1921	Whirlpool ^{T} +	37 L 7
950	**WHITE**	
1669	*White Blue* ^{T}	34 B 2
1928	White Jade ^{T} + (see † Jade)	10 A 2
1920	Wigwam ^{T} +	14 G 10
1925	Wild Aster ^{T}	44 L 9
1927	Wild Cherry ^{T} –	6 B 6
1705	*Wild Dove Grey* ^{T} (Wild Pigeon)	7 C 7
1926	Wild Honey ^{T}	13 B 9
1927	Wild Iris ^{T}	44 B 5
1925	Wild Orchid ^{T}	52 A 7
1705	*Wild Pigeon* ^{T}	7 C 7
1927	Wild Raspberry ^{T}	6 E 6
1915	**WILD ROSE** ^{T}	3 I 7
1926	Wild Strawberry ^{T}	6 K 5
1916	Willow ^{T} +	15 L 6
1672	**WILLOW GREEN** +	22 K 2
1928	Windflower ^{T}	53 F 6
1924	Windsor ^{T}	47 J 10
1912	Windsor Blue ^{R}	44 B 8
190-	Windsor Green ^{B} +	22 L 12
1925	**WINDSOR TAN** ^{T}	13 G 12
1705	Wine †	
1926	Wineberry ^{T}	55 H 4
1924	Wine Dregs ^{T} ++	7 L 7
1789	*Wine Grey* ^{T}	?
1789	*Wine Lees* ^{T} ++	7 L 7
1886	*Wine Purple* ^{R} (see † Wine)	
17 —	Wine Red (Wine †)	
1805	Wine Yellow	11 E 2
1912	Winter Green ^{R}	21 E 9
1926	Wintergreen ^{T}	23 A 12
1926	Winter Leaf ^{T}	15 A 8
1916	Wireless ^{T}	35 I 7
1892	**WISTARIA [BLUE, VIOLET]** †	41 E 8
1928	Witchwood ^{T} +	14 A 8
1690	Withered Leaf ^{T} (Feuille morte, †)	5 A 12
1923	Withered Rose ^{T}	5 J 10
13 —	Woad, *Wode* ^{V}	47 A 10
15—	*Oad*	
1789	Pastel	
1000	*Wad*	
1805	*Wood [Brown]* †	
1920	Woodash ^{T}	27 A 1
1928	Woodbark ^{T} +	14 B 7
187–	Woodbine Green ^{M} +	22 L 6
1839	*Wood-pigeon Grey* ^{T} †	
1925	Woodland Brown ^{T}	8 H 8
1902	Woodland Green ^{M} +	23 L 6
1926	Woodland Rose ^{T}	4 A 10
1926	Wood Rose ^{T}	6 B 9
1922	Wood Violet ^{T}	42 K 10
1918	Wren ^{T}	8 A 11
1928	Wrought Iron ^{T} –	48 C 1
1916	Yacht ^{T}	35 J 11
18—	**YALE BLUE** †	44 D 12
1921	Yama ^{T}	25 J 7
700	**YELLOW**	
1927	Yellow Beige ^{T}	13 H 7
1712	*Yellow Berries* ^{V} (Persian Berries)	10 L 6
15—	*Yellow Brazil Wood* ^{V} (Old Fustic)	11 L 5
1910	Yellow Bronze ^{M}	11 L 8
1552	*Yellow Carmine* ^{P} (Realgar)	10 L 8
1926	Yellow Daisy ^{T} +	10 K 3
1688	*Yellow Earth* ^{P} + (impure Y. Ochre)	11 L 7
17—	*Yellow Madder* ^{P} (Stil de Grain Y)	10 K 2
1481	**YELLOW OCHRE** ^{P} (see Ochre, Yellow)	11 L 7
	Yellow Realgar ^{P} (Orpiment)	10 K 3
	Yellow Sienna ^{P} (Yellow Ochre)	11 L 7
187–	Yellow Stone ^{M}	12 G 2
1928	Yellowstone ^{T}	12 K 6
	Yellow Wash ^{P} + (impure Y. Ochre)	11 L 7
15 —	Yellow Wood ^{V} (Old Fustic)	11 L 5
1912	Yew Green ^{R}	24 L 1
1905	Yolk Yellow	10 L 5
1927	Yosemite ^{T} +	11 B 6
1924	Yucatan ^{T}	12 L 9
1924	Yu Chi ^{T}	29 K 12
1892	*Yucca* ^{F}	22 A 6
1912	*Yvette Violet* ^{R}	46 I 8
155 -	*Zaffre Blue* ^{P} (Smalt)	43 D 11
1920	Zanzibar ^{T}	8 L 5
1764	*Zedoary Wash* ^{P}	10 J 6
1892	Zenith [Blue] (see † Sky Blue)	34 A 7
1920	Zephyr ^{T}	42 B 1
1900	**ZINC** +	45 B 2
	Zinc Green ^{P} (Chrome Gr.)	
179–	*Zinc Green* ^{P} (Cobalt Gr)	20 D 9
1912	Zinc Orange ^{R}	10 J 9
	Zinc Yellow ^{P}	10 L 4
1868	Zellow Ultramarine	
1922	Zinnia ^{T}	4 L 2
	Zinnober Green ^{P} (Chrome Gr)	
1892	*Zulu* ^{T}	8 A 6
1928	Zuñi Brown ^{T} +	7 C 11

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